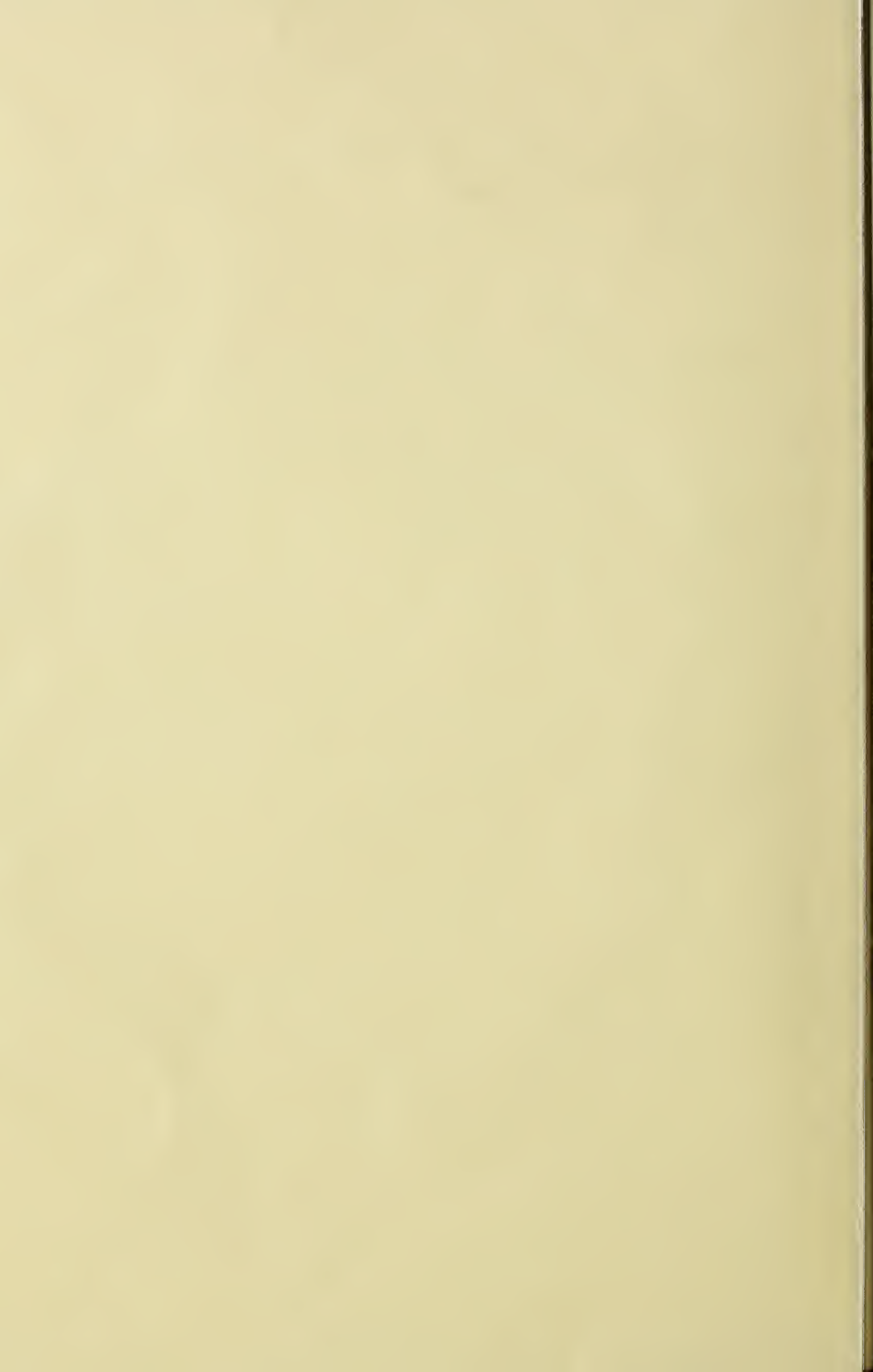


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THE MARYLAND FARMER:

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Our London Letter.

(Regular Correspondence.)

LONDON, ENGLAND, June 17, 1881.

Few people can remember a more delightful spring than that which ends with the present month. It is true that the east wind prevailed for an unusually lengthened period, and returned again and again, until we began to fear we should never get rid of it; but the unaccustomed treat of days and weeks of sunshine was so great as to enable us to put up with the east wind, and, in the warmest part of the day, even to forget it. Unfortunately the weather which has been so pleasant to human beings has not been suitable to the crops, either in arable or in the pastoral districts. First, the drought has been extreme, and spring corn and pulse have been quite unable to make their usual progress, while pastures are hopelessly bare of what by this time should be a fair cut for scythe or mowing machine. Wheat will bear almost any amount of dry weather in spring, and very few showers afterwards will suffice to bring it to a good crop, so that, at any rate on the heavy lands, it is not to the drought that we must attribute any deficiency in wheat, except its undeniable shortness, which is partly the result of drought. But besides the drought, there have been sharp May frosts, which have done much mischief in field and in garden, while the early portion of what should have been spring was only a prolongation of winter. As is always the case in a dry, slow-growing period, too, wireworm and other species of grub have worked much mischief. Thus crops, which are more backward than I ever remember to have seen them before, have been thinned by some of the numerous enemies that prey upon them. Wheat is

the only crop that can be said to be fairly promising. It is very backward; but with a suitable season, and a harvest rather late than early, I see no reason why it should not come up to an average. Barley and oats, on the other hand, are so extremely backward, and in some districts so defective in plant, that we can scarcely imagine any season bringing them up to a fair standard. It is not too late for the season to turn in favor of good root crops. For potatoes, where not up early and injured by frost, the weather has been very favorable. The hay crop must be extremely deficient. Not only are permanent as well as sown grasses and covers very short and thin, but a large average of the latter, that, but for the shortness of keep would have been saved for hay, has been fed off. On the whole, the chances of a harvest which would to some extent make up for the past losses are extremely small. Indications point quite in the opposite directions. It is true that the warm showery weather of the last few days is precisely what was needed to help the crops to make up for lost time; but the season for the next three months must be exceptionally adapted to the requirements of the crops to produce an average all-round harvest.

As to live stock, the shortness of feed, with losses past and present through disease, must be reckoned as serious drawbacks to the prosperity of breeders, graziers and dairy farmers.

Such, then, is the position of the British farmer at the present juncture, taking a general view of the country. Of course there are exceptional districts in which the crops are looking well. There always are; but these little lands of Goshen count for next to nothing in a general estimate.

If as is only too probable, we should have another poor general harvest, what

will happen? Why, agricultural ruin must be more widely spread than it is even now; more farms than ever will be uncultivated, or in their owners' hands; and rents, already fallen in all but the most favored localities, must come down with a run. The time for temporary remissions is surely over. Quite apart from bad seasons, the increase of foreign competition is alone sufficient to depreciate rents.

Farm Work for August.

This is a sort of *liesure* month with most farmers, but a busy one with planters. The small grain crops have been harvested and perhaps threshed out, and put away in the granary or sold. The rye and oat crops have been this year unusually productive, but the wheat crop has fallen short in the opinion of the knowing ones, 20 per cent., or 100,000,000 bushels in the crop of the whole country, owing to early freezing last fall, the late spring, insects, May drought, and a wet June. The corn crop will likewise prove a short one, because it came up badly owing to the seed being imperfectly ripened; much was destroyed by the cut worm after it came up. This class of worms was unusually prolific this year and did great damage. June was so wet that the crop could not be worked well in its early stages and much of it is yet not grown enough to be beyond the necessity of cultivation. The cotton crop and the tobacco crop both have splendid prospects. The area devoted to both these crops have been increased considerably, and, unless something unforeseen should occur, the general product will be enormous and a great aggregate increase over former years.

Tobacco.

This crop will now need the utmost vigilance and require unwearied energy to keep clean of worms and suckers. Top low and leave only 12 to 16 leaves on a plant. Top as soon as the "button" forms on the plant. To destroy the worms, use all the hand-labor you can command and all the poultry—turkies, geese and ducks—you can get hold of, and also destroy all the "horn-blowers"—or tobacco butterfly—to do this kill them by hand, reward the children for each fly they kill, and put a few drops of cobalt in the flowers of the plant, and in the flowercups of the Jamestown weeds and of all flowers that you find the horn-blowers dip their long proboscis into. There is poor economy in growing a large crop of tobacco that it may be eat up by worms, or so

multilated as to be not salable. Most planters "top" too high—much is lost by such greediness or mistaken policy. Low topping produces large leaves, more body and firmness, gives more weight to the same plant and ripens earlier. But the suckers must be broken off before they get three inches long or they will exhaust the plant. Let the tobacco get well ripened before it is housed if possible. It takes four or six weeks to ripen properly, after it is topt. It gains flavor, richness, substance and weight in ripening. Do not crowd it when housed, either by having too many plants on the stick or the sticks too close together. Ten plants of good sized growth are enough on a stick five feet long, and the sticks should be 12 inches apart on the joists or stringers.

Rye.

It is a convenient way to sow rye amongst the standing corn, and it will get good roots and growth, so as to make fine winter pasture for sheep and young stock. The rye crop requires early sowing to produce well. Pasturing on it by sheep or calves and young colts until the middle of March will not materially injure its grain yielding powers. A gentleman from the Eastern Shore of Maryland told us that he sows it specially to give him an abundance of green food for his dairy cows and other stock in winter and spring, either for soiling or pasturage. He states also that when it was full grown and before the seed was ripe, he always cut and tied in bundles a portion of it, to tie his corn shocks with, and also to tie the bundles of corn fodder. It when cut green was more pliable and made stronger rope than when it had become ripe, and used in that way it never left seed to grow amongst the wheat that follows corn. If the straw is used for tying the corn heaps after the rye had ripened, no matter how carefully it had been threshed or flailed, there would be seed left which the following year appeared in the wheat and caused much trouble to pluck it out of the wheat crop.

Late Potatoes.

Keep the late potatoes free of grass and weeds and the land well stirred until the blossoms appear. Destroy the bugs or beetles by applying Royal Purple or Paris Green in a liquid form through the newly invented syringe, or mixed two pounds to a bushel of plaster and put in a course or guano bag and shaken over the vines. By the latter method the beetles will be killed and the plaster will help the growth of the potatoes. Apply this remedy as often as the

potatoe bugs seem formidable. The ravages of the potatoe bug are stopt easily by this simply applied remedy.

Roads.

This is a good time to repair your farm roads and help the supervisor to improve the public roads. Don't patch, but do the work thoroughly; have a solid bed, gravelled or covered with broken stone and sand if possible; have a gutter, not a ditch, on each side, with inclined planes for the sides, to carry off the water, and under-drain with tiles of burnt clay or of wood under the bed of the road where it is wet, holds water or subject to it after rains. A road well made will, with very little trouble, be kept in perfect order for many years. Good roads are a blessing and a comfort as well as a valuable recommendation to any neighborhood. A judicious expenditure in improvement of roads will enhance the value of lands in a community twenty per cent. above the first cost of such expenditure. Let farmers ponder this assertion well.

Stock of all Kinds.

The grass will likely fail this month and all stock should have a supply of green fodder, corn, peas, vegetables, millet or some such substitute to make up the loss of grass. See that they have a plentiful supply of pure water, shade and salt.

Milk-cows will fall off in milk, unless they have a good feed of green food and two quarts of bran, or mill feed, each cow twice a day. Feed the bran dry, with occasionally a little salt.

Hogs ought to have a little grain every day to keep them in thrifty, growing condition. Let them have water in plenty, so they can enjoy both drink and a bath when they please. Young pigs should have a full supply of milk or slops with meal and bran thickening.

Sheep require much attention now. Dogs and thieves just at this period seem to have a great desire for sheep-meat. For the gad-fly keep a trough well tarred and salt sprinkled over it. As a remedy against dogs and thieves, use strychnine and the shot-gun. After one or more depredators have received a taste of either you will likely not be troubled again in a hurry. These defenceless animals deserve the watchful protection of their owners. A good sheep is worth more than a rogue or a worthless dog. A valuable dog will be taken care of by its master and a thief will be altogether better should he get a load of powder and shot.

Turnips.

Sow turnips amongst the corn in most places and harrow the seed in with a wooden-tooth

harrow or cultivator. For main crop prepare a piece of light land, plowing it deep and thoroughly pulverizing with the harrow. Make it rich with well rotted manure, and sow over it a mixture of 200 pounds of kainits and 200 pounds of bone meal; sow over the ground before harrowing three or four bushels of salt per acre. Sow in drills or broadcast, yellow globe, large white Norfolk, or purple strap-leaved turnip seed. As soon as the seed is sown, run a heavy brush or light harrow over it to put it under the soil. When the plants begin to bottle, thin with the hoe or pass a harrow over one or more times until they are thinned sufficiently, so as to stand six inches apart each way if broadcast; if drilled the drills should be 20 inches apart and the turnips stand in the drill 6 inches apart. If the fly attacks them, sow over them while the dew is on, a mixture of soot and plaster, or ashes and sulphur. Say 1 peck of soot and 3 pecks of plaster, or half a bushel of dry ashes and 1 pound of flower of sulphur. Repeat the dose every third day until the leaves get in the rough state or the fly disappear.

Corn-Broadcast or Drilled.

It is not too late to sow corn—sweet-corn is best—for feeding green to help out the pasture, or for curing as fodder for winter or for ensilage. It should now be sown as early as possible on well prepared and highly enriched soil, either broadcast or in drills. Drilling is far preferable. Drills 30 or 36 inches apart and 8 to 12 grains to the foot in the drill. Cultivate it often until it gets two or three feet high, and it will yield as heavy a crop or heavier than if sowed broadcast, and be easier to cut, handle and cure, or to prepare for ensilage. We hope every farmers will sow some and try the Silo or ensilage system and give us next winter the results of his experiment, that our FARMER friends may form proper conclusions as to the economy and value of this new method of preserving green crops.

GETTING RID OF STUMPS.—In the autumn or early winter bore a hole one or two inches in diameter, according to the girth of the stump, and about eighteen inches deep. Put into it one or two ounces of saltpetre, fill the hole with water, and plug it close. In the ensuing spring take out the plug and ignite it. The stump will moulder away, without blazing, to the very extremity of the roots, leaving nothing but the ashes.—*Scientific American.*

Garden Work for August.

Every gardener should save seeds as they ripen. Save none but such as are from the earliest and best specimens of the different kinds of vegetables. In this way he will be sure to secure for himself the surest, safest and best of the sorts that he cultivates and never feel that uncertainty and doubt be experiences when he buys. It is economical to save seeds, if a proper exercise of judgment has been used and due regard had to the earliness and perfection of form of the article selected for seed. There are some sorts of seeds best to be bought from reliable seedsmen, such as early peas, York cabbage, cauliflower, &c.; but, as a rule, one to be successful should grow with care his own seeds, except when he desires a new variety or a change, he should never buy such seeds as beets, parsnips, carrots, onions, beans, cabbage, tomatoes, &c. Often a person neglects to save the seed of the best specimens of a superior of vegetable and has to buy at a high price seed that proves worthless and it is years before, if ever, he gets the kind of equal worth with what his negligence or misfortune deprived him of. Seeds are easily saved and should be well dried in the shade and then put away in paper bags—secure from all insects and other marauders.

Winter Cabbage.—It is not too late to set out on rich well-prepared ground, Savoy or Flat Dutch cabbage for the winter use.

Salads.—Lettuce, corn salad, endive, should all be sown this month. Do not, we beg of you, neglect to try corn salad, one of the nicest winter and early spring salads ever brought on the table. Not much used in Maryland, but by whomever it is tried it is pronounced delightful and ought to be grown extensively, being hardy and easy of culture.

Bush or Snap Beans.—Sow a few rows of Bush dwarf-beans for fall use and for pickling. The Black-wax is the best.

Beets.—The long blood turnip beet if sown now on deep, rich, light soil, and the season be at all propitious, a crop of tender, fine size, delicious beets will be produced superior to those planted in May last.

Celery.—Set out well rooted, stocky plants now; they will be better, because more tender, than if planted earlier. Nobody can have too much celery. It always sells well.

Tomatoes.—Select a few of the earliest, best flavored, smoothest, largest and most perfect in shape for seed.

Water Cress.—Transplant this popular salad along side streams and near springs. Set the plants 8 or 10 inches apart and cultivate them to keep them free from weeds or grass until they fully occupy the ground. After that they will give no further trouble but yield a full crop for years.

Corn.—Plant some of the early varieties, and if the ground be dry, moisten the hills well before and after planting, compressing the moist soil about the grains, and they will soon sprout and bear a crop of ears that will afford a luxury for the table in autumn.

Cucumbers.—Planted now and well watered, will be in time to give pickles and afford a welcome dish before frost. Liquid manure applied to the roots twice a week will cause rapid growth and increase the productiveness and crispness.

Onion Seed.—Sow some onion seed in a shaded place and not very rich soil, and giving them a little protection this winter by a covering of brush, you will have a fine lot of setts next spring.

Radish.—Sow seeds of Black Spanish, Rose colored or White China Winter Radish, and try some of the California mammoth radish, which is firm, pleasant, and grows to immense size.

Spinach.—Do not neglect to sow in rows or broadcast a full supply of this delectable vegetable. It requires very rich and well-prepared ground. Prickly or fall spinach is best for winter. Spinach and jowl in March is a dish for the King of epicures.

Peppers, Celery, Cauliflower and Brocoli.—Keep all these free from weeds and the soil well stirred, and drawn, each working, near to the plants. Never allow them to suffer for moisture, but when you water, say twice a week if the dryness of the weather requires, be sure to give a thorough watering so as to wet the roots fully three inches deep. Do not sprinkle every evening or morning, but irrigate perfectly if only once a week.

Pot and Medicinal Herbs.—Gather these as they come in bloom, dry in the shade, and pack closely in paper or vessels so the air will be excluded. Sage, thyme, &c., may be gathered or cut twice a year. Some pluck leaf by leaf of the sage, but it is best to shear it or cut it right off and it will soon put out new stems unless cut too close to the ground. There is no excuse for country people to be without these culinary herbs, for they are as easily grown as weeds.

Turnips.—Sow a bed of strepleaved turnips.

The Application of Farm-Yard Dung.

J. B. LAWES, L. L. D., F. R. S.

The economical application of farm-yard dung must, to a certain extent, be based upon its composition, and there are two processes by which this may be ascertained, first by direct analysis, and second by calculation.

Many years ago I published a series of calculations based upon the food consumed upon a farm of 400 acres, the quantity of straw used as litter and the loss by respiration. The farm was estimated to have 100 acres in turnips or mangels, 100 in hay, and 200 in wheat and barley. The amount of dung produced was equal to 957 tons (of 2,000 pounds), or about 2½ tons for each acre. The composition per ton was as follows:

Water.....	1,400
Dry matter.....	600
Minerals.....	55½
Phosphoric acid as phosphate of lime.....	10
Potash.....	10½
Nitrogen.....	13

This estimate agrees very well with the analyses made by Boussingault, Voelcker and ourselves, and may be said to represent the composition of good unfermented farm-yard manure. We are indebted to Dr. Voelcker for several analysis of the dung in different stages of decomposition, and we show that only a very small proportion, probably not more than two pounds of the 13 pounds of nitrogen contained in each ton, is in the form of ammonia. Considerably more than 90 per cent. of the whole of the dung consists therefore of water and wood. A large proportion of the manure constituents of the dung exists in combination with the straw or the solid excrements of the animals, substances which decompose very slowly in the soil, and for this reason it takes a larger amount of dung to produce much effect on vegetation. Our experiments lead us to the conclusion that the influence of one dressing of dung may not be entirely at an end for 20 or 30 years, or perhaps even a longer period.

With the composition of dung before me, and the known composition and condition of the various ingredients it contains, the question has often occurred to me as to whether it will be possible to do anything by way of improving its fertilizing powers,

Ought we to fix the ammonia, or ought we to try and manipulate it in some way to hasten its action? If we can get the full effect of an artificial manure in one year, why must we wait a life-time to see the end of one application of dung? Time is money; the old-fashioned idea that a manure is valuable for its *lasting* properties will not bear argument, as, if true, it would then be better to leave bones and phosphate rock unground.

With all this scientific prelude, I am bound to confess that I am just as helpless in regard to the management or improvement of dung as the most old-fashioned farmer. It is of no use fixing ammonia where there is hardly any to fix. It costs nothing to look at your dung with the idea of doing something to it; but you certainly cannot touch it without going to some considerable expense. I, for my part, therefore am content to let it alone. As I grow a good many mangels, I apply the greater part of the dung to this crop, my practice being to open out the furrows and apply about 20 tons per acre, then, after earthing up the furrows, I proceed to drill the seed upon the top.

If I did not grow roots, I should apply the dung in Autumn to the clover or grass; this, of course, would involve exposure to the atmosphere, but I should not fear much loss on this account, or at all events I do not think there would be more by this process than by any other.

To give some idea of our attempt to estimate the loss of the ingredients contained in dung, I may say that we applied it to grass land between 1856 and 1863, and, having taken a crop of hay every year since, at the end of 20 years we had only got back 14 per cent. of the nitrogen supplied in the manure, less than one-half of the potash, and not much more than one-third of the phosphoric acid. The effect of the dung last applied 18 years ago is still quite distinct, and when it will come to an end no one can predict. On the whole, as regards the question of economy, I am therefore inclined to advise that the dung should be carted from the yards to the field, and left there in a heap until required for application, or that it should be applied direct from the yards. All labor expended upon dung adds certainly to the cost, but it does not add with the same certainty to its value.

For the Maryland Farmer.

South-Side Virginia.

In speaking of South-Side Virginia, the writer means the counties lying on or adjacent to the Richmond and Danville Railroad, (which is, by the way, one of the most prosperous of southern railroads) i. e. Amelia, Nottaway, Prince Edward, Lunenburg, Brunswick, Charlotte, Mecklenburg and Halifax counties—in what is known as the black belt—once one of the most prosperous sections of the South, where every variety of the finest Virginia tobacco was raised. Prior to the war the wealth of this section was principally in slaves, and the chief products of the country were negroes and tobacco; at the close of the war the negro being no longer a chattel, but a man and a brother. The Southern farmer found his wealth had vanished, his tobacco fields no longer profitable, as of yore. Other sections had in the meantime learned to raise the weed, and, notwithstanding the south-side farmer swore the stuff tasted like mullen and oak leaves, the fact remains the same. Competitors had entered the field—"Old Kentucky" sent to the Richmond market her heavy dark tobacco, every plant a pound, which proved alluring to the eye of the foreign buyer; who, in his desire for gain, for his government—knowing the poor peasant knew as little of the real flavor of the Virginia shipping leaf, as he did of the "Westphalia hams." Quantity takes the place of quality. Again our "Bright" Virginia met a competition in Connecticut, and later in Lancaster county, Penn. Having lost both our slaves and our monopoly in tobacco, we found ourselves with more land and less labor and capital to work it; with our energy paralyzed we were thus left by the war in a deplorable condition. Just as we began to recover from the ravages and calamities of the war the terrible and blighting panic of 1873, with all of its evils came upon us, and swept over the whole land as a terrible disolution, and our last state was worse than the first. But prosperity has dawned upon the country—owing to the mighty efforts of our various political leaders (?) and the "statesmanship of the plow" having triumphed over adverse circumstances. South-Side Virginia, like other sections, finds herself about to take an important

place in what the New York *Herald* calls the "New South."—her young men, like others in our Southern country, have become accustomed to the changed condition of things.

Lands once waste have been taken up, improved, and crops raised that would astonish some of the old farmers could they rise from the dead. The want of capital and population alone keeps back this section. It is situated about midway between tide water and the mountains, hence is free from the malaria, of the one, and the typhus, of the other; it is well watered, with never failing streams, and springs in almost every field on a farm. The vine is indigenous to the soil, "Muscadines, Fox, Chicken and other native grapes flourish and do well. Fruit and berries of every variety that grow outside of the tropics are grown here to perfection.

The best grade of shipping tobacco is grown here—in Halifax and the adjacent counties, the finest bright tobacco is grown—both grades bring the highest market price—the shipping from \$10 to \$18, and the bright from \$15 to \$75 per hundred pounds. The yield of the bright is much less per acre than the dark shipping—the bright is "flue cured;" its production is very profitable. The lands of the counties of Halifax and Pittsylvania, known as the ridge or mountain lands, that could have been bought at the close of the war at from 75 cents to 1 dollar per acre, are eagerly sought after, and are being sold at from \$15 to \$25 per acre. They are being rapidly cleared, put in cultivation, and thousands of new barns and farm houses are going up in every direction. The population is rapidly increasing, and the people growing rich. Within the past five or six years the grasses have been successfully tried in various parts of South-Side Virginia; and as the good book tells us, "Blessed is he who makes two blades of grass grow where one grew before." Certainly this section will be abundantly blessed—as the blades are rapidly multiplying, and each year finds more grass seeded than the former year. I know one farmer near Lawrenceville, in Brunswick county, whose yield of timothy is over two tons per acre, at \$20 per ton. Clover grows finely on all of the red lands. I have seen as fine fields of clover in South-

Side, Virginia, as are grown in the Valley or any other section of the State. Timothy, orchard, and other grasses do well, and can be raised here as readily as elsewhere. Most of your readers, doubtless know, that, where grasses are successfully grown there is no difficulty about raising other crops. Winter and Spring oats do well, according to the seasons. Wheat is not very extensively cultivated, but my observation leads me to believe that, with proper care and culture, it will pay as well here as in any other section of the State. I know many farmers who raise 16, 18 and 20—and a few who raise as high as 25 for one bushel seeded. This is not a bad yield, when it is recollected that no fertilizer is used on the wheat; as but little or no fallowing is done. The wheat crop follows the tobacco, and is benefited by and made from the manure used upon the tobacco crop.

To sum up, this is as good a farming section, all things, considered, as is to be found in any State. Cereals, grasses, sheep, fruits, vines, corn, wheat, oats, rye, roots, cotton and tobacco are profitably and successfully grown. The country is well watered, and heavily timbered, and, although sparsely settled, its inhabitants are the most genial and hospitable, of a proverbially hospitable people. Churches of the various religious denominations are to be found in almost every neighborhood. The public school system is in successful operation. The mail facilities are ample and convenient to every part of the country. Railroads are in reach of every section, within a day's travel of the most remote section, with their express and telegraph facilities. All these advantages not found in the West and South-West are offered to the immigrant and settlers in South-Side, Virginia. The great trouble is a large surplus of land and a scarcity of people. What is needed is capital and immigration to develop, the many and varied resources of the country, and, besides the many inducements enumerated may be added, that large and small farms can be had *at less than the cost of the improvement thereon*. Say, from \$3 to \$6 per acre, a farm of from 100 to 200 acres—with buildings that could not to-day be put up at, at the cost, of what the farm and buildings can be bought at.

This is no fancy picture, but each asser-

tion and statement herein made can readily be substantiated to the satisfaction of any one by the writer. A. J. W.

German Carp.

The German carp are the right thing to have for those well up in fish. The United States Fish Commission commenced to import them some five years ago. They soon multiply in such a ratio as to add materially to the food supply of the people. Professor Baird estimates that one pair breeding carp is sufficient to stock an acre of water, and that the spawn from a single fish will produce from five to ten thousand young. Discussing the carp and the water farm, the Philadelphia *Ledger* says: "The business of water farming has already its rules and its profits. It makes an old farmer start to be told that a quarter of an acre, laid down in water, will bring him in more profit in food raising than a quarter of an acre, cultivated in any other way. Also that corn fed to carp brings in twice or three times the returns in food that the same number of bushels fed to pigs or cattle. The carp is a vegetable feeder, so that it can support itself in the vegetable growths and conservæ of ponds and streams. But it thrives and increases enormously when regularly fed as other stock is fed. It does its own grazing if let alone, but it can be fattened for the market on bread crumbs or cabbage leaves. Its most profitable food, however, is boiled dry corn—that is, corn out of the corn crib dried on the cob and then boiled." The four-year-olds in the government ponds weigh from ten to fifteen pounds. Carp is the chicken of the water as to flesh, and we have given these details some prominence for our readers, because of the ease with which this quarter acre crop is raised, and because whatever makes food abundant and profitable to raise on small plots of ground is of interest to all readers.—*Western Agriculturist*.

Tomato vine should always have some kind of support. The fruit will grow larger, ripen sooner and more easily, and will be better flavored than if the vines are allowed to lie on the ground.

For the Maryland Farmer.

Field Experiments with Fertilizers.

The plan of field experiments referred to in the Farmer by C. W. D. Jr. is good, so far as it goes, to ascertain what the land needs for the crop tested upon it, but different crops have varied wants and the adaptation is different. Some crops assimilate their food more readily than others; in others the time of growing to maturity is short and they must have what they need within that time, while those of longer and slower growth do not require their food so rapidly.

These are all important points and in order to demonstrate them I would suggest a slight change of the plan and procure general results and not confine it to one or two crops.

Take an acre as suggested and have ten parallel strips, which would be about two hundred feet long and twenty feet wide, with the fertilizer on each strip different, and one or more without any for the purpose of comparison. Across these strips sow or plant in widths of fifteen feet, more or less, as to the number of crops desired to be tried. If they are twenty feet wide, there will be one hundred squares, and the opportunity of trying ten different crops in ten different conditions of fertilizer, with scarcely any more labor than trying one; this will show the diversity in the wants of various crops and that what is good for one is not adapted for another. I would offer a suggestion that the first row be left in grass, the second sown with clover, the third and fourth rows two different kinds of grain, the fifth with flax; this leaves five rows for the various hoed crops. Corn, potatoes, cotton, tobacco, beans and others which will be tried as location, climate and temperature differ.

It will of course be understood that spaces must be left between the different squares and that the roots do not run into forbidden grounds, which would impair the reliability of the tests.

It is reasonable that every State Agricultural College should be induced to make these practical tests, and that in every State a law should be passed making it imperative on the State and County Agricultural Societies to make these tests. It is especially fitting that such a measure should be adopted in Massachusetts, the Agricul-

tural Societies of which receive each a bounty of \$600 from the State "to aid the cause of Agriculture," but which is now devoted in great part to the development of horse racing and profitless amusements.

If these experiments were tried in every county in a State, then tabulated, we would have results from different soils, temperatures and rainfalls, which would form a rational foundation on which our farmers could build. It cannot be denied that this desired information of such vast importance to the farmer can be gained at a trifling expense. Compared with its actual value, and when obtained in one State and its advantages become known, there is no question but what all the States would fall into line and thus contribute to the advancement of the cause of Agriculture, the foundation of our growth and prosperity.

MASSACHUSETTS.

Growing Pickles.

I have grown pickles for market for a great many years, and have found them one of the most profitable market crops that I have ever grown. I have usually planted them after early peas, and this crop matures in ample time for planting cucumbers, but if no crop precedes them I plow the land early and then replot just before planting. Harrow and roll until your land is in good condition and then lay it off five feet each way, with a single shovel plow, running it as deep as possible. The manure for the crop should be turned over once or twice, two or three weeks before it is to be used. We generally have it so fine that it can be readily shoveled, and we put a shovelful in each hill. In making the hills we either scatter the manure a little or press it down so as to have it about four inches below the level of the ground. As at this hot season of the year the soil dries out rapidly, we make the hills three or four inches higher than we want them, and when we plant we knock the top of the hill off with the foot and this gives fresh moist soil to drop the seed on. We drop ten or a dozen seeds in a hill and step on it so to press it firmly into the soil, and then with the side of the foot push a little soil over the seed. This is the quickest and best way of planting, as one man can plant several hundred hills an hour and by stepping on the seed

it is firmly pressed into the moist soil so that it will sprout quickly, and at the same time the earth which covers the seed is loose so that the young delicate plants can come up readily.

I never plant earlier than the middle of June, and often as late as July 10th. Occasionally the earliest planting is disturbed by the striped bug, but I believe that I never knew them to be injured when planted as late as the last week in June. If the ground is moist and the weather warm they will come up in four days, and in ten days they will be in rough leaf, when they should be thinned to four in a hill and a little fresh earth put around them. The ground should be thoroughly cultivated every week until they run so that you cannot get through them, which will be if the weather is favorable, in about five weeks. In six weeks from planting the Early Cluster, we begin to pick, and at this time the land should be free from weeds and in fine mellow condition. It is the general custom of farmers to plant the long green cucumber for pickles, but all of our pickle factories prefer the Cluster, and my experience is that it will yield double, comes into bearing much sooner, and is more easily gathered. The Cluster will begin to bear by the time the vines are a yard long, and when planted five feet apart each way will not cover the ground, so you are obliged to tramp the vines, but the long green will spread so that you cannot get through them without injuring the vines.—*AGRICOLA, in Practical Farmer.*

Red Clover.

The *Agricultural Gazette* of January 17 contains an article by J. B. Lawes upon the efficacy of gypsum as a manure for red clover, and in it he refers to the result of some experiments at Rothamsted, published twenty years ago. Red clover has continued to grow upon the garden soil at Rothamsted up to the present time, both also that which is wholly unmanured and upon that receiving gypsum. There is more produce upon the gypsum plot than on the unmanured, but less than there is upon the plot receiving alkaline salts. If gypsum acted as a medium for obtaining ammonia from the atmosphere, it ought to be a better manure for the

cereal crops than for clover, which, however, is not the case.

I am disposed to think that the action of gypsum is due to its supplying both sulphur and lime to the crop, and that it may also liberate and make more available some of the organic compounds of the soil. It has been proved that the leaves of clover contain a large amount of sulphur as such, which sulphur is burned away, and not found in the sulphate of the ash. In a soil rich in decayed vegetable matter all the important ingredients taken up by clover may be in excess, as compared with sulphur and lime; in such a case the application of gypsum may produce the wonderful results we read of in the United States. A few years ago, when the agriculture of the States was in a distressed condition, I came upon a remark, made by a farmer in one of the journals devoted to agriculture, to the effect that farming was generally prosperous where gypsum produced good crops of clover! The soils upon which the gypsum produced such good results must either have been naturally very fertile, or there must have been large reserves of fertility stored up in them.

The want of special knowledge, with regard to the food available for the clover plant in the various soils in this country, makes the success or non-success of an application of gypsum a mere matter of speculation; and while I fully appreciate the value of red clover as an agricultural crop, I am disposed to think that it has obtained credit for certain qualities to which it can lay no just claim.

If a householder finds the food in his larder, or the beer in his cellar, disappearing in an unaccountable manner, he is apt to think that some one has taken them; and however much those who have access to the larder or cellar may protest, and appeal to their previous good character, he may still have his suspicions. I own to having somewhat of a fellow feeling with the householder, as regards my position and that of the red clover in the garden soil. I find that an immense quantity of the nitrogen has been abstracted. I also know that the red clover does consume a large quantity; indeed the fact is admitted by the plant, but at the same time it protests that not one particle was taken from the soil; asserts that the whole was taken from the atmosphere; offers to

call M. Ville from Paris in support of this view of the case; takes its stand upon previous good character, and appeals to all the science and practice of the world for testimony in its favour!

What am I to do? The nitrogen is gone, and no other plant has had access to it but the red clover. Possibly it may have been wrong to expose the plant to temptation in the form of a large store of its favourite food, but I must say in justification that it absolutely declined to live in my service under any other conditions.

THE annual meeting of the Society for the Promotion of Agricultural Science will be held at Cincinnati, Tuesday, August 16, the day preceding the sessions of the American Association for the Advancement of Science. The following gentlemen will present essays or communications: L. B. Arnold, Patrick Barry, Prof. W. J. Beal, "Testing Seeds;" Prof. G. C. Caldwell, Prof. J. Henry Comstock, "Protection of Orchards from the Ravages of Insects;" Prof. A. J. Cook, "Methods of Destroying Injurious Insects" and "New Species and Races of Bees;" Prof. C. A. Goessmann, "Special Fertilization and its Influence on the quality of Crops;" Dr. Byron D. Halsted, "The Agricultural Instruction of the Young;" Prof. Eug. W. Hilgard, "On the Interpretation of Soil Analyses;" Prof. S. W. Johnson, Prof. R. C. Kedzie, "The Ripening of Wheat" and "Vesiculating Test for Wheat Flour;" Dr. E. Lewis Sturtevant, "Relation of Seeding to the Quality of Fruit and Vegetables;" J. J. Thomas, "The Roots of Plants, or Experiments on Roots." The meeting for reading papers and discussing the same will be open to the public, and all persons interested in the promotion of scientific agriculture are earnestly invited to be present. W. J. Beal, Lansing, Mich., President; E. Lewis Sturtevant, So. Framingham, Mass., Secretary; and G. C. Caldwell, Ithaca, N. Y., Committee on Meetings.

Mr. John Miller, of 54 West Fifth street, tells us that he was cured by the use of St. Jacob's Oil of a complicated case of rheumatism of ten years standing.—*Cincinnati Irish Citizen.*

Fodder.

Much has been said during the last few years about corn-fodder, especially in the form of "ensilage." Whatever may be the future of ensilage, it can only be used by those who can afford to build silos and buy machinery; but corn-fodder is useful in this section to every one who owns a cow or horse, and I propose to give my limited experience. I drilled in 1,200 square yards of land in fodder-corn, rows three feet apart, on the 21st May, 1880; worked it once with single small mould-board plow. Commenced feeding on it 8th July following; it had reached the height of seven feet, but had no shoots or tassels. Fed one horse, four cows and three shoats to July 29th—a period of twenty-one days. Plowed up same lot on August 3d, following, and drilled in the same quantity of ordinary white corn. The second crop was fully equal in bulk to the first. This gives forty-two days' feed for five head of stock (leaving out the pigs), or seven months' feed to one cow from about one-fourth of an acre of good land. The cows declined somewhat in milk, after about two weeks' feeding. As the first crop of fodder-corn was not planted until May 21st, I should have had time to cut a crop of rye from the same land if it had been sown to rye the previous fall. Corn-fodder is hard to cure, but it can be readily done in good seasons, if suffered to reach a certain stage of maturity before it is cut. This is not only necessary to enable the plant to eliminate the crude juices which prevent its cure, but also to form sugar, which gives a good part of its value as food. The stalk is mature enough to harvest when shoots and tassels appear. As much of the nutritive value of the article is in the stalk, the crop should be drilled in thick enough to make stalks small, so that they may be all eaten. This is all important. Some I am now feeding, which is very nice, will measure from five to eight feet in height, and from one-eighth to three-quarters of an inch in diameter. It was put away last fall quite dry, but is now soft, damp and succulent, much relished by the cows, and producing a good flow of milk. Corn-fodder, in a green state, contains only about 7 per cent. of carbo-hydrates (gum-starch, sugar, &c.) and should be supplemented with clover or

mill-feed when we wish milk, or meal when fat is desired. When dry it contains from 24 to 38 per cent. of carbo-hydrates, depending upon its hygrometric state. Its dampness is generally greater after being stored. I do not think it is yet settled which is the better way of using corn-fodder—in silos, or cured.

My fodder-corn was cut with an old-fashioned reap-hook, tied up in bundles not very large, with two bands on each bundle, as the stalks are long and supple, and put up in shocks of moderate size on the same day cut. After drying some the shocks were double, and remained in shock until hauled to shelter—15th or 16th of October. The shocks need sometimes to have the inside bundles put on the outside, but no extra care beyond what common sense and circumstances suggest. I prefer drilling to sowing, because the crop is larger on account of the working, and the stalks greener and less "burt" then sown.—*Southern Planter.*

VALUABLE TABLE.—The following table will show the number of checks or hills contained in an acre of ground at certain distances:

1 foot apart each way,	43,560
2 feet apart each way,	10,890
3 feet apart each way,	4,845
4 feet apart each way,	2,722
5 feet apart each way,	1,740
6 feet apart each way,	1,210
9 feet apart each way,	597
10 feet apart each way,	435
12 feet apart each way,	302
15 feet apart each way,	193
20 feet apart each way,	108
25 feet apart each way,	69
30 feet apart each way,	48
40 feet apart each way,	27

FOR CABBAGE WORMS.—I would like to say from experience that salt will not injure cabbage nor the worms either. But ten cents worth of ground black pepper will keep one hundred heads free from the cabbage worm. Take a common pepper box and dust the worms every morning before seven o'clock, and it will kill every one it touches, large or small—*L. W. Reno Co., Kan.*

THE WORLD'S WEALTH.—The following striking paragraphs which are being extensively published under credit to *Harper's Weekly*, are taken substantially from Mulhall's "Progress of the World," a late English work of great statistical interest:

In point of wealth the United States stands near the head of the list—third on the list of all the Western nations. The United Kingdom of Great Britain and Ireland heads the list with a capital valuation of \$44,400,000,000, then comes France with \$36,700,000,000, the United States with \$32,000,000,000, Russia with 15,000,000,000, and the Low Countries with \$11,150,000,000 of capital collectively. They are the valuations made by those countries of their resources. What is the annual income per inhabitant of various countries? We come to the front in this comparison. The average annual income in the United Kingdom is \$165; in the United States, \$165 also; in the Low Countries \$150; in France, \$125; in the British colonies, \$90; in Germany, and also in Scandinavia, \$85. In this reckoning Russia with her 90,000,000 people is out of sight as yet; she will not be very long.

On the score of annual accumulation our case is even better, relatively far better. The annual accumulation of wealth in Germany is \$200,000,000; it is \$325,000,000 in the United Kingdom; \$375,000,000 in France; in the United States it is \$825,000,000. Our increase in national wealth since 1850, says a good English authority, would be enough to purchase the whole German empire, with its farms, cities, shipping, manufactures, etc. The annual accumulation has been \$825,000,000; and therefore each decade adds more to the wealth of the United States than the capital—value of Italy and Spain.

Every day that the sun rises upon the American people it sees an addition of \$2,500,000 to the wealth of the Republic.

A Texas farmer invested \$150 in a ten-acre grove of 2000 black walnut trees ten years ago, and the nuts bring him \$1000 a year now. In another ten years he expects the grove to be worth \$50,000.

Subscribe for the MARYLAND FARMER.
Terms—\$1.00 per year year, in advance,

HORTICULTURAL.

Small Fruits.

For the Maryland Farmer.

Every vegetable garden is incomplete without the appendage on a liberal scale of small fruits. If ripe vegetables are nourishing and health promoting when taken in their freshness from the garden in which condition is their greatest richness, much more is it so of the various kinds of small fruits that arrive at a state of perfect maturity. In considering this subject it must be admitted that the full enjoyment of these luxuries requires more or less labor; but as this is the common lot of mankind, there is nothing in it that should deter even the average farmer from furnishing his family with those natural gifts that can be enjoyed by means of his own extra exertions. A farmer once said of the town of Columbia, Conn., (and it is no less true of all towns,) that if the time that was spent in lounging about the post-office, groceries and shops, was devoted to the tillage of the land the whole town might be made like a garden. Now, instead of doing all that, suppose that of the time spent at the places named, each farmer should appropriate only a small proportion to the proper care of his garden, and in tending small fruits; he will be just as well off and his family a great gainer thereby.

It is right that there should be hours of recreations, that the boys should have their day for amusement, but it is not always profitable to spend a great amount of time where gossiping is the chief amusement. To one having had no experience it will be surprising what quantities of fruit may be obtained from comparatively few plants.

The list may contain strawberries, raspberries, currants, gooseberries, blackberries and grapes, which can now be found in so many varieties, that, by selections they may be had well through the season. The principal point is to have a moderately rich soil in which they are set, and that they be kept properly cultivated, and renewed as is necessary.

The strawberry is first in time of ripening, and yet the season of it may be lengthened by a selection of early, medium and late ripening varieties. There is considerable difference in varieties regarding the attention required, and there are

probably few that can be so thoroughly left to themselves as the Crescent Seedling. It is, in respect to its struggle for existence, a very remarkable berry; it will thrive on an average soil, and for hardiness and full fruitage can hardly be surpassed. The plants may be set in the fall upon ground prepared for them, and if kept reasonably clean will yield liberally the next season. The writer set one fall twelve young plants, that, coming by mail, were not in the best condition, whereby two perished, but from the remaining ten plants were picked the next season fifty-two quarts of berries. The ease in taking care of this berry removes an important objection raised by ordinary farmers that they have not the time to spend in such work. When once started there is no trouble in removing plants from the runners that are set out each summer. Many varieties can hardly be kept alive even by being protected, but the Crescent is exceedingly hardy. With raspberries about the same may be said; some varieties are reproduced or can be renewed very easily while with others it is extremely difficult.

It is therefore good policy for the farmer who desires to save time to indulge in the varieties of easiest cultivation. Of these Brinkles orange in a rich soil is a vigorous grower, is very productive, and if the tips of canes are allowed to droop to the ground and take root and so furnish with no trouble whatever plants for a renewal. The currant furnishes a fruit highly valued by the good housewife for preserves and jellies, and can be grown and renewed very easily. The principal conditions of success are a deep, rich, moist soil, and clean culture with an occasional judicious pruning. They may be reproduced by cutting off shoots of one year growth and sticking them in a moist soil leaving but one bud above ground and near the surface, when they will take root and can be transplanted as desired or placed originally where desired to grow.

Blackberries and grapes should not be lost sight of although in order to obtain the best results, perhaps more attention, in the time of proper pruning is required. And yet, with these are varieties that are preferable because of requiring less care than others.

For a nice blackberry, the Kittakinny will serve a good purpose, and also

grapes, the Hartford Prolific, Concord, Ives Seedling, and some other of the older standard varieties can be relied upon, and for the farmer are perhaps preferable to many of the later, although more fancy varieties. But, perhaps even now some good man will say, Oh! I can yet along without all these fixings; yes, 'tis true you may, but when you consider that perhaps for the want of some of the acid contained in fresh ripe fruit, the system of some member of your family may become de-ranked or poisoned, and sickness induced, a physician's bill contracted with perhaps resulting death, can you afford to do without a moderate supply of good things that the God of nature is disposed to bestow upon man, if he will accept the offering on the conditions required—a little self sacrifice.

WILLIAM H. YEOMANS.

Columbia, Conn.

Easy Blanching for Celery.

Peter Henderson says he knows of no vegetable on the cultivation of which there is so much useless labor expended as on celery. This is the reason so few cultivate it for their own use, and why those who attempt it do not succeed better. The chief difficulty is in blanching it well, and in securing a place for it where it is easily accessible. Although often prepared for the table late in autumn or early in winter, there are few who care much for it at those times when an abundance of fresh fruit can be had, and when so many other vegetables are easily obtained. On the approach of spring, and when the warmer weather of April arrives, well prepared celery becomes delicious and is eagerly sought. The great point, therefore, is to have it ready immediately after the departure of the coldest weather. We have long been in the practice of blanching it in narrow trenches, one spade wide, and deep enough to admit the whole length of the plants standing erect in the trenches, which are covered thickly with forest leaves on the approach of winter. Towards spring these plants are finely blanched. But this mode of packing them away late in autumn requires much care and labor, and they are not very accessible for use when wanted.

A simple, easier and better mode, at least for moderate supplies, is to keep plants, when taken up, entirely away from

earth, if intended for winter blanching. About the middle of November they are taken up on a dry day, and placed in water-tight troughs, or other vessels, in a quite dark cellar, the plants standing erect and closely together. Enough water is poured on the roots to cover them, and the supply is continued through winter as it evaporates. These constitutes the entire labor. The stalks are gradually and handsomely blanched in the darkness, and many new ones spring up during the winter months, especially if the apartment is not very cold, and these new shoots are remarkable for their delicacy and perfect freedom from any particle of rust, appearing like polished ivory. A small, separate apartment in the cellar, without windows, answers well for this purpose. Boxes, tubs, or any vessels which will hold a few inches of water may be employed. The plants, as grown in the open ground, need not be earthed up at all, or they may be slightly earthed to bring them into a more compact form if desired. Probably the best way would be to adopt the course which is sometimes employed, of setting out the plants in summer on the level surface of deep, rich soil, eight or ten inches, or a foot apart each way, in order that their close growth may tend to give them a more upright form. They are merely kept clean by hoeing through the season.

—*Country Gentleman.*

Petunias.

Our correspondents frequently mention the petunia as one of the best winter flowering window plants. A writer in an English journal, in reference to the petunia for conservatory decorations, says:—"I would strongly recommend anyone having such places to keep gay, to get a packet of seed of the double varieties, and sow it at once; double kinds being best adapted for pot culture and not so suitable for turning out, their flowers being too heavy to withstand the effects of wind and wet, which, toward the end of the season, sadly mar their beauty."

By sowing early, large blooming plants may be had by spring. It is necessary that the young plants should be kept close to the glass, for the least shade tends to draw them up and make them puny.

Although double petunias may be propagated by means of cuttings, seedlings are preferable, as they grow stronger and give little trouble; but when any of very superior merit show themselves, it is always worth while keeping a stock plant of such for cuttings.

The single forms make grand beds, if planted where they can have plenty of room to spread, but as they are naturally strong growers, a poor soil is best for them, if deep, so that the roots could get well down; that checks any tendency to over robustness, and yet affords the necessary support during dry weather. Besides forming magnificent beds, single petunias make fine masses in borders; but when used in that way they require support. The neatest and best way of effecting this is using coarse meshed wire cut into yard lengths, which, tied to stakes at the ends, form a capital frame, through which they spread their shoots and completely hide the wire with their gay blossoms and foliage. There are many other plants of a similar character for which a trellis made in this way answers well, and as they last for years, nothing for the purpose can be cheaper or more handy.

As petunia seeds are very small, they should only be lightly covered at the time of sowing, otherwise the young plants are unable to push through the soil. Pans for such seeds should be filled nearly full with rough leaf mould, and on top of that should be put an inch or so of finely sifted soil, made perfectly level and smooth. That done, the next thing is to give a gentle watering, and then they should not be disturbed for a few hours, when all will be ready for sowing. This should be done thinly, and a little sand sprinkled over the seeds, when, if placed in a moist heat, they will soon germinate, especially if the pan be covered with a sheet of glass, or kept dark with a piece of paper for two or three days, as by that means evaporation is intercepted and a more uniform warmth maintained.—*Vick's Monthly*.

Hop culture in England has been steadily decreasing since 1878, the decrease in acreage amounting to 5000 acres. One of the causes is insufficiency of capital, resulting in inefficient cultivation and a lack of fertilizing elements,

Russian Mulberry.

This valuable and ornamental tree was first brought to this country by the Russian Mennonites, and trees, the seed of which was planted five years ago, are twenty feet in height and six inches in diameter and have borne full crops of fruit since they were two years old. Color of fruit red and black, flavor sub acid. In Russia they are used as we use raspberries and blackberries. Large quantities of this fruit are sold annually in the markets of Russia. The tree is, as near as we can lean, a cross between the *Morus nigra*, or black mulberry, and the native Russian variety. The trees grow very large, frequently reaching a height of 50 feet. The timber is hard and durable and fence posts made from it have the lasting qualities of Catalpa or Red Cedar. A part of the trees have beautiful cut leaves, and some of them have as many as twelve lodes. Some of the trees were shipped to James Vick last autumn, who speaks of the beauty of the leaves in his *Floral Guide* for 1881. The bark is grayish while, branches drooping. The Russians also use it as a hedge plant, and it stands shearing as well as any tree on the list. It also grows as readily from cuttings as cottonwood or willow. Last year cuttings made trees three to five feet in height. The tree is perfectly hardy. Mercury 30° below zero and not even the twigs injured.—G. J. C., in *Fruit Recorder*.

Notions of the First Settlers.

Mr. W. H. H. Amidon, one of the first settlers in the town of Gilmantown, Wis., and one of the most industrious and hard working men in the county, has been very severely troubled with rheumatic pains during the past few years, so much at times, that he was disabled from performing manual labor. Learning of the wonderful cures effected by the use of St. Jacobs Oil he procured a few bottles and experienced immediate relief. Many others of our acquaintances have used it and express themselves as highly gratified, with the relief it has afforded them. This kind of medicines can be bought everywhere.—*Non-dovi*, (Wis.) *Buffalo Co. Herald*.

Shrinkage of Dried Fruits.

It may be a matter of interest to those who contemplate drying fruit, and who have never noted the amount of shrinkage the various kinds make in the process of drying, to know exactly what that waste is. For the benefit of readers, the *Inter-Ocean* has compiled the following table, showing the loss by evaporation by the Alden process, of 100 pounds of the kinds of fruit named, and the number of pounds of dried fruit that will remain at the close of the process. Drying in the open air the loss will be a little more, but the difference is so little that it may be reckoned the same in business calculation:

Fruit.	Pounds green fruit.	Per Cent. of waste.	Pounds dried fruit.
Apples.....	100	88	12
Peaches.....	100	88	12
Apricots.....	100	86	14
Pears.....	100	88	12
Plums.....	100	86	14
Grapes.....	100	80	20
Blackberries.....	100	84	16
Pitted cherries.....	100	84	16
Gooseberries.....	100	80	20

Drying Fruit.

A. M. Purdy says, in the *Fruit Recorder*: The process of drying fruit by evaporation will create a revolution in fruit growing. With two evaporators we put up last season 50 or 60 tons of apples, peaches, raspberries, etc. Hundreds of bushels of these otherwise would have gone to waste and been worthless. As it was, we obtained just as much for small and wind-fall fruit as for the best. Peaches we began to dry as soon as they colored, while still hard, and from hundreds of bushels of small peaches that would not have sold in market for enough to pay for growing and marketing, as well as large quantities of wind-falls that are gathered up and rinsed off, we obtain as good as \$1 to \$1.50 per bushel net, by cutting up with skins on and drying in our evaporator. Another season we shall dry corn, pumpkins, squashes, tomatoes, raspberries, blackberries, etc.

As an illustration of the depression in farming lands in England, the *London Truth* announces that a farm in Mid Kent, which sold within the last twenty years for \$112,500 was put up the other day at a reserve of \$45,000, but there was not a single bid.

POULTRY HOUSE.

CONDUCTED BY T. B. DORSEY,

St. Denis, Baltimore Co., Md.

In assuming control of this department I must crave the indulgence of the readers of the *FARMER*, if in any way I fall below the well-known literary standpoint of the magazine. But all the information that I shall endeavor to convey will be strictly practical and derived, not from theorizing, but from a long and intimate personal acquaintance with the fowls, their habits and their diseases. I attend personally to my own birds, and my knowledge of them is therefore as full as I could obtain. I shall divide the "poultry house" into three heads, one or more sub-articles under each of which will be given to the readers of the *FARMER* each issue; and if I can succeed in conveying any valuable information, or in increasing the breeding of pure-bred fowls throughout the country, I shall feel that my work will not have been in vain. The three heads will be

I—Varieties and Breeds of Poultry.

II—Habits and Diseases of Poultry.

III—Care and Management of Poultry.

THE BUFF COCHIN.

HEAD I.

NUMBER ONE.

The "Cochin craze," as it has been called, was more prevalent in Great Britain than in America, for though we had and still have many breeders and worshippers of the Asiatic varieties, the Brahmas, both Light and Dark, have rivaled, if not been more popular than the Cochins. There are four varieties of the Cochins as regards color, namely, three of what are known to fanciers as solid color—White, Black and Buff—and one of mixed color, namely, the Partridge. The Buff is the one with which we have to do. Like all Cochins they are of huge size, cocks running as high as 16 pounds, and hens up to 12 pounds. They lay a smaller egg than most of the other Cochins, but are remarkably good winter layers, supplying the housewife at the time when eggs are generally scarce and high priced. They stand confinement even better than their congeners, are quiet,

easily handled, extra good setters, and except when too heavy, make very good mothers, especially early in the season, when their masses of fluff afford a warm shelter for a spring brood from the chilly March winds. Though disposed to be broody at an early date, this disposition can be staved off by reducing their allowance of feed (in fact it is best never to feed Cochins too high), and they can be made to keep on laying much longer than they naturally incline to. Their meat is good, though there is a deficiency of breast meat, their legs a nice rich yellow color, and when caponized they are a valuable addition to the household provender. The eggs are generally fertile and hatch well, the chicks hardy and easily raised and if fed well and continually when young, soon develop to grand size and shape. The color is a deep buff throughout, the cocks being darker than the hens, and all signs of white feathers or mealy yellow should be avoided in the selection of breeding stock. Black in the tails of hens is very objectionable; and even in cocks I much prefer a rich chestnut color. In choosing breeding stock be especially observant of two things, shape and relationship. Inbreeding brother and sister, tends to decrease the size, though breeders often risk it for the purpose of retaining some other characteristic. The shape of the cock should be broad, with a very short back, like what is called "close-coupled" in a horse, the feathers making a short but sharp curve up to tail. Legs well set apart and not too long. Body full and carriage erect. Choose a hen as you would a brood sow, namely, for roominess, and see that her fluff is abundant, and her carriage though low, easy and comfortable. For small farmers with limited range for fowls, the Buff Cochins will prove a valuable bird if properly treated and not turned out to hunt his own living in all kinds of weathers and under all sorts of disadvantages.

THE practice of mixing iron scraps, filings, or drilling chips from machine shops, in the soil about the roots of pear trees, is becoming general with some of our best fruit-growers. The health and productiveness of the trees are greatly promoted thereby. Pieces of iron hoop, old scythes, and other useless bits of iron, have long been used by the most successful growers.

THE DAIRY.

For the Maryland Farmer.

Breeding Dairy Stock.

NUMBER THREE.

As soon as the heifer comes into milk, then comes a course of feeding and watching, the one to develope and strengthen her milking points, the other, to test those qualities, so that if they do not reach a certain standard, or the heifer exhibits undesirable traits of character, or defects in her milking qualities, local or variable, she may be righted and none of her stock saved to breed from, for the prepotency of bad qualities are rather more transmissible than good ones, and only by a rigid expulsion of them can anything like fixed types of character be established. One great mistake that farmers make is to allow their heifers to mate for their second calf too soon after the first. This should be delayed at least six months, so that the milking glands may have a chance to enlarge and the flow of milk be secured, for after copulation the milk is apt to be diminished in quantity, and again, the first milking period of the young cow should be a protracted one, one year, and form the "habit" of long milking seasons. It has been sanctioned by some that the value of the cow will be enhanced by her going barren the year following her first calf, simply to protract this milking period, but as a rule, if the second calf follows the first, after a period of fifteen or sixteen months, the result will be as satisfactory, while the "fresh" heifer will give a much larger quantity of milk the second year, and will be more "paying."

It is exactly at this point where the average dairyman breaks down in his expectations, and declares thorough breeding a delusion and the stock inferior to the common varieties. A cow is simply a machine to eat and assimilate food and transform it into milk. To produce 500 pounds of butter in a year, is an average limit for high bred cows, and 400 pounds should be a reasonable expectation. Contrasted with this, the native cow that makes 200 pounds of butter is a good one, and of the coarser foods, consumes the same quantity as the finest wrought one. How is

this increased production secured? By exactly the same treatment, shelter, food and system as the other. Not at all! In breeding the improved dairy cow, her system has undergone an almost entire change. The nervous power has become more powerfully wrought, her power to assimilate food is enlarged, the hardy, "muscular" vigor of the native cow has given place to the finer developed structure, and the vigor that the native cow possesses, the take-care-of-herself qualities, has been transformed into milking qualities, and all this has required better care, diversified foods, and those calculated to produce milk, clean, well ventilated stables, and at no time withholding food or attempting to "pinch through till spring," to save buying food. If nothing different is provided for the improved stock than has been for the natives, a simple diet of grass and hay, the year round, unless it be in March, when little hay is often fed, and large quantities of cornmeal take its place, only to be withheld when "grass starts," then forsooth! the highly bred cow must be a humbug, and native stock, the "plan." J. G.

Ohio, June 12th.

Milk comes from Food.

We know many dairymen who give their cows a small grain ration all the season, and keeping a strict account of the yield of milk, show that they make money by this liberality. One who feeds 50 cows, told us lately that he fed 4 lbs. of middling per day, through the season, finding that he was fully paid in the extra milk; and the cow was in so much better condition in the fall, that it saved him the whole cost of this extra food in wintering. He has followed this system for ten years. He called our attention to a neighbor of his, keeping about the same number of cows, who followed what he called the economical plan—let his cows pick for themselves—both taking their milk to the same factory. Good feeding produced \$45 per cow; poor, \$27—a difference of 66 per cent. in favor of liberality in feeding. This illustration can be found in almost any dairy town. Let every dairyman ask himself to which class he belongs. *National Live Stock Journal.*

MILK turns sour in thunder storms because during their continuance ozone is generated in the atmosphere. Ozone is oxygen in a state of great intensity, and oxygen is the great acidifier throughout nature. The excess of oxygen in the air imparts acidity to the milk by the formation of lactic acid.

It is said, and we see no reason to doubt it, that if a cucumber vine is trained to run up a stake on which a few stubs of limbs have been left along its whole length, the crop will be enormous. By this plan the vines not only occupy less space, but are afforded opportunity to follow their natural habit of climbing up, instead of running on the ground,

George W. Hallock, who has a farm of forty-five acres on Long Island, raised last year 15,000 quarts of strawberries, 23,000 heads of cauliflower, 2,300 bushels of onions, 3,000 bushels of potatoes, 173 bushels of wheat, 100 bushels of corn, 36,000 cucumbers, 6,300 bushels of Brussels sprouts, 3,500 bushels of turnips, 4,000 bushels of carrots, and 150,000 cabbages.

The Horse-Power of the World.

It has been estimated that, in 1878, on the 270,000 miles of railroad, there were at work 105,000 locomotives, of an aggregate 30,000,000 horse power. Taking the nominal horse power at an effective force equal to that of three horses, and the work of a horse as equal to that of seven men, it will be seen that the steam engines represent the force of nearly 1,000,000,000 men, which is more than double the amount of workers on the face of the globe. The steam engine, which is fed by coal, has, therefore, tripled the productive power of man.

A. MR. LANCASTER, near London, Ontario, has forty-six acres of celery, and his celery commands the highest prices in the market. His plantation, at 10,000 plants per acre, requires 460,000 plants. They are set in trenches, and vast quantities of manure used. Seven horses are used in his eighty acre vegetable garden. Radishes between the celery bring about \$140 per acre, and the celery \$350 per acre. The labor comes to \$250 per week in Summer and Autumn.

MARYLAND FARMER

A STANDARD MAGAZINE,

DEVOTED TO

Agriculture, Horticulture and Rural Economy.

EZRA WHITMAN, Editor,

COL. W. W. W. BOWIE, Associate Editor,

141 WEST PRATT STREET,

BALTIMORE, MD.

BALTIMORE, AUGUST 1st, 1881.

TERMS OF SUBSCRIPTION

ONE DOLLAR A YEAR IN ADVANCE.

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TO ADVERTISERS!

The large circulation of the Maryland Farmer makes it one of the best mediums for advertisers of all classes. Its circulation will be largely increased by our reduction in the Subscription Price, and hence add to its advantages as a medium for advertisers. The terms of advertising will remain as heretofore.

THE MARYLAND FARMER is now read by more Farmers, Planters, Merchants, Mechanics and others interested in Agriculture, than any other magazine which circulates in the Middle or Southern States, and therefore is the best medium for advertisers who desire to extend their sales in this territory

☞ We call attention to our Reduction in Price of Subscription.

TERMS.

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SPECIAL PREMIUMS

For those who may Canvass for New Subscribers.

Any person who sends us 100 Subscribers, at \$1.00, will receive the world-renowned Howe Sewing Machine, with all the latest improvements. Value, \$50.00.

Any person who sends us 80 Subscribers, at \$1.00 each, will receive 1 Young America Corn and Cob Mill, worth \$40.00.

Any person who sends us 50 Subscribers, at \$1.00 each, will receive 1 of the celebrated Wheat Fans, which has taken nearly 20 premiums. Value, \$28.00.

Any person who sends us 25 Subscribers, at \$1.00 each, will receive a Roland Plow. Value, \$12.00.

Any person who sends us 15 Subscribers, at \$1.00 each, will receive a Farm Bell. Value, \$6.00.

Any person who sends us 6 Subscribers, at \$1.00 each, will receive a Nickel-Plated Revolver, Long Fluted Cylinder. Value \$2.50.

THESE ARTICLES WE WARRANT TO BE FIRST-CLASS.

☞ It will not be necessary to secure the subscribers all at one time. For instance, if any one wants the Mill we offer for 80 new subscribers, he can send the names in any number he chooses, and we will allow him a whole year to finish the club.

☞ COL. D. S. CURTIS, of Washington, D. C., is authorized to act as Correspondent and Agent to receive subscriptions and advertisements for the MARYLAND FARMER, in the District of Columbia Maryland and Virginia.

☞ Our friends can do us a good turn by mentioning the MARYLAND FARMER to their neighbors, and suggesting to them to subscribe for it.

Agricultural Fairs for 1881.

MARYLAND STATE AGRICULTURAL and MECHANICAL ASSOCIATION.—The Executive Committee has issued a handsomely printed catalogue, embracing the names of all the officers of the Society, the Rules and Regulations and the Premium List for its meeting in October next, at Pimlico, beginning on the 22d of October and to continue four days.

The premiums are numerous and very liberal. The prospects for the ensuing meeting are very flattering. The whole people of the State, as they should do, seem to take a deep interest in the success of this State Fair, which has not been held for three years past, owing to a state of untoward circumstances, but after its long rest, seems to have awakened with new life and energies, and will beyond doubt prove, this year, to be a great success, a credit to its managers, and an honor to the State.

Every person who desires to become an exhibitor (ladies particularly) should obtain at once a copy of the Prize list, and begin the preparation of their articles for exhibition.

Coming directly after the Pimlico Races, many fine horses will be kept over to contend for the purses offered at the State Fair. Indeed it will be equivalent to a blending of the two institutions so far as trials of speed are concerned and the gathering of crowds of spectators. This year it will be a pleasure to travel by rail from the City to the very foot of the Grand Stand on the Agricultural grounds; this is an advantage enjoyed by few like associations. A few grumbling opponents have circulated for the hoped for injury of the Society, that the steam cars running into the grounds would frighten horses and make it dangerous for persons to visit the Fair in carriages. This is untrue in fact, as there are other entrances to the grounds than the one entered by the cars. It has been proven by the experience of

the last meeting of the Jockey Club that practically in regard to this matter, there was no trouble whatever with the race-horses, or visitor's horses on account of the steam cars, which cannot, from their position, be of the slightest inconvenience to horses. No body need be frightened into staying at home by this bug-a-boo, and no old lady or gentleman who desires to attend the Fair in their own conveyance need stay away any more than to stay away from a city because their horses may be frightened by the steam whistle, which we hear daily and hourly in the crowded cities, on the highways and in the grain fields and barn yards of our prosperous farms.

THE AMERICAN AGRICULTURAL ASSOCIATION issues a valuable journal of about 250 pages three times a year, which will be sent free to every member of the association. The sum of only *three dollars*, forwarded to J. H. Reall, secretary, 127 Water street, New York City, pays for annual dues for remainder of this year and for 1882. This entitles the member to 4 issues of the journal and free admission to the Society's Exhibitions. Such liberal terms ought to induce a great number of farmers in the United States to become members of this National Association. Each number of the journal sells for 75 cents to all who are not members of the association. Thousands of copies are sold outside the membership.

Catalogues Received.

From John Jenkins, Fairview Nursery, Moorestown, N. J., Trees, Vines and Plants —Fruit Trees a specialty.

E. P. Roe's Catalogue of Small Fruits and Grape Vines for 1881. Cornwall-on-Hudson, N. Y.

From Ellwanger & Barry, Rochester, N. Y. their Catalogues of Small Fruits for 1881.

STRAWBERRIES.—The trade this year was immense. The sales of this fruit in New York City alone aggregated at least \$3,000,000.

Worth Noting.

The National Cotton Planters' Association will hold their next annual meeting at Atlanta, Ga., during the *first* week in November. The Cotton Exposition will call that week "The Planter's Week," when will be assembled a full representation of the Planters of the United States. Cotton, corn, tobacco and hop planters from all parts of the Union will then be present. The great interests of the chief staple crops of the North, South, East and West will be in harmonious conclave, each represented by men who are properly representative of these immense interests, and not only information will be imported, but unity of interest, will be the outgrowth of this National meeting and friendly greetings, interchange of personal views, and intimacies formed socially, all tending to cement the bond of a fraternal Union of sentiment, common interest and common welfare, which will do more to cement the Union, than all the policies and trickeries of politicians of the grand divisions of the country in their councils assembled. Men must meet together and confer face to face, to accomplish important events. Here at Atlanta is the place where the Greek will meet Greek, and in the tug of war there will we trust spring up a fraternal feeling of mutual trust and confidence that will redound to the interest of the whole rural population and to the cementing of the National League for ages to come.

For the information about the wise selection of this International Southern Exposition at Atlanta, as the place for the meeting of the Annual Planters' Society, we are indebted to Mr. Nagle of the *Texile Record*, Philadelphia. This gentleman afforded us, one morning last month, a very pleasant interview at our office. We found him a highly intelligent and enthusiastic promoter of the Cotton Exposition or "*Southern World's Fair*," and a delightful conversationalist. We regretted

his engagements deprived us of a longer interview. The "*Texile Record*," is one of the largest sized monthlies and best conducted, with greatest circulation, of any monthly journal devoted to one specialty, of any paper published in America. All who are interested in the growing, handling or manufacture of any or many of the Texile crops would do well to become subscribers to this large and elegant monthly.

Another Southdown Ram for the Park.

The Druid Hill Park Commission has lately received from Mr. Henry Webb, of Cambridgeshire, England, another fine ram for the Park flock. This one is to be named Gov. Hamilton. The two last rams imported by the Commissioners, through Hon. J. Merryman, were from the same famous Webb flock, and were given the names of Gov. Carroll and Joshua Vansant. We would suggest that the next importation be from Lord Babraham's flock, by way of infusion of fresh blood. The Webb Southdowns have enjoyed a world wide reputation for many years, but the Babraham Southdowns have become very noted since their triumph at the Paris World's Fair. We think they have more size and if possible more beauty and symetry than the renowned Webb Southdowns.

FISH HATCHING.—Col. Thomas Hughlett, State Fish Commissioner, has hatched and deposited in the waters of the Eastern Shore this season 7,550,000 young shad, 2,835,000 perch and 8,275,000 herring, aggregating 17,835,000 little fishes.—*Centre-ville Record*.

Correction.

In our issue for July, an error appears in the article of A. P. S. For the word "neutral" read "natural" on top line of 1st column, page 218.

For the Maryland Farmer.

Maryland Agricultural College.

The commencement exercises of the Maryland Agricultural College closed this year with more than ordinary interest. Most of the under-graduates will return, pledging themselves to bring new students to swell our numbers.

The first entertainment was the contest for the Warfield medal, given by Prof. J. D. Warfield, for declamation. The committee awarded the prize to J. V. Martin, of California. The baccalaureate sermon of Rev. Jno. B. Williams was able and classical. Charging these young men to stand by their cherished inheritances, he urged them to guard life's charities and study its reverence.

The committee upon Agricultural essays, consisting of Allen Dodge, Dr. Eversfield, Duncan Campbell, Professors Grabowski and Warfield, after a day's session, awarded the medal given by President Parker, to Harry Freeland of Howard county, whose subject was, "The Restoration of Worn Out Soils." An essay upon "Fertilizers," by P. A. Bowen of Prince George, and "Garden Soils," by Robert Lee Porter of Baltimore, were much admired, getting a vote from each of the committee.

The entertainment of the Mercer Society, on Monday evening, was a debate on our policy toward the Indians, and an address by Rev. Wm. D. Morgan, upon Will-power.

The salutatory and valedictory addresses both referred on Commencement day to the presence of Gov. Hamilton. The former, by Harry E. Gale, compared him to Cincinnatus; the latter by Wm. H. Thomas, of St. Mary's county, referring to the landing of the Ark and Dove, with their two hundred gentlemen adventurers, in an obscure settlement in his native county, beheld with pride a noble State, founded upon faith and freedom, first to give us a virgin capital, now in queenly grandeur standing upon the Potomac, and guarding the tomb of a nation's guardian. As graduates of a Maryland college, proud of her revolutionary heroes and inheritors of her broad statesmanship, he welcomed her honored Governor, trusting it might be his proud privilege to enlarge her resources, develop her usefulness, and hand her down as a jewel in the crown of her sister States." The Governor's address, though entirely prompted by the oc-

casional, was an able tribute to the science of all sciences. If the old Roman farmers, Cincinnatus among the number, could live upon twelve acres of land, there was no excuse for failure in these days of intellectual advancement. His tribute to Maryland, with her unimaginable wealth of minerals, was an eloquent effort and brought down long and continued applause.

Referring to the use of our agricultural institutions, he pointed out the fact, that Prof. Higgins' analysis of Maryland soil had done much to awake interest in the cause of agriculture. Charging our young men to stand by this noble profession, and above all, never to desert their State, he closed with a promise to exert his official and personal power to encourage education. In connection with this report I may mention that much interest was shown in our experimental wheat plots, some ripe and harvested that day.

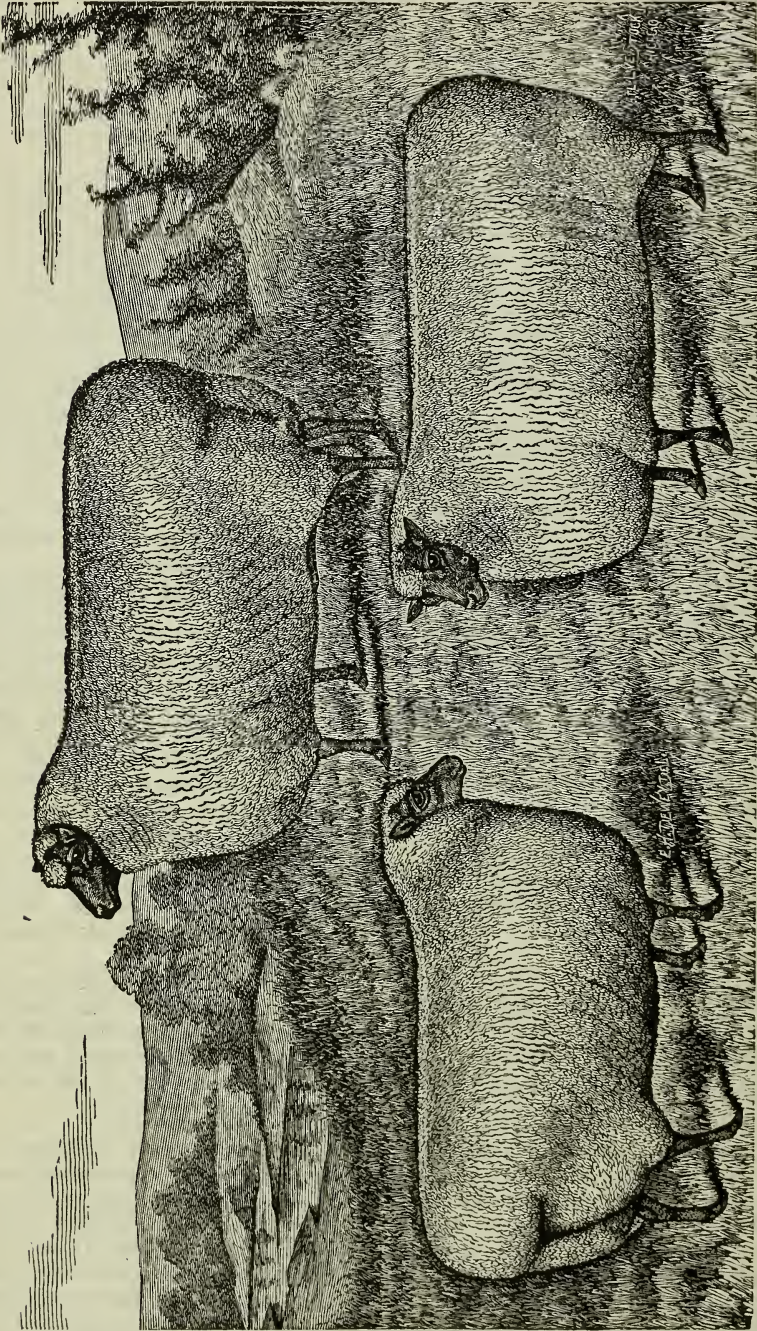
The varieties in $\frac{1}{4}$ acre lots were sown at the same time, fertilized by a mixture of 250 lbs. of bone and guano.

The Fultz was first to ripen, an average head containing 52 grains; Mammoth Red, much admired by the Governor, ripened two days later, containing 38 grains; Champion Amber, 40 grains; New South Wales, a long bearded, blue stem, very green, with only 29 grains, large and plump; Hægis' Prolific, ripe two days later than Fultz, 40 grains; York White Chaff, 39 grains, ripe same time; Raikerbrode, 46 grains; Coffee, a large plump grain, with long beard, only 24 grains; Siberian, a medium grain, 44; Sandominka, very small, very green, and only 32 grains. This Polish wheat is fully two weeks later than Fultz.

The actual yield of grain and straw will be noted and published. The contrast in color, height and form of heads of these varieties, was a very pretty sight, the morning of their harvest. J. D. WARFIELD.

Journalistic.

That excellent weekly newspaper the *Marlboro' Gazette*, edited and published by I. S. Wilson, the worthy son of his worthy sire, the late George W. Wilson, who established it and built up its fortunes, which after his lamented death have never been suffered to languish by the energetic son and successor, has reached its 46th anniversary. Long may it continue its honorable and prosperous career!



OXFORD DOWN YEARLING LAMBS.
SIRI D BY "FREE LAND."

Bred by T. S. COOPER, Coopersburg, Pa., and now owned by COOPER, MADDOX & Co., "Oxford Park," Reading, Ohio.

LIVE STOCK REGISTER.

Oxford Down Sheep.

We take pleasure in presenting our readers with a beautiful picture of three lambs from the flock of Messrs. Cooper, Maddux & Co., of Oxford Park, Reading, Ohio. These portraits were taken from life, and having seen their size, we believe that they have not been flattered by the artist, however faultless they may appear in figure and the outlines of beauty in the picture. This remarkable breed of sheep are the "coming breed in this country," if they prove, what is confidently expected, to acclimate as well as their congeners the Hampshires, Southdowns and Cotswolds. "Freeland" is certainly the grandest ram we ever saw. Mr. Cooper has bred them for several years in Pennsylvania, and found them to be as hardy and prolific and healthy as any other of the improved breeds in the country. When complying with our request for the use of the electrotype, Mr. Cooper wrote us the following letter which we do not feel disposed to keep from our readers:

"I am now permanently located at Reading, Hamilton county, Ohio, (10 miles from Cincinnati) with the entire flocks and herds previously kept at Linden Grove, Coopersburg, Pa., having connected myself with Wm. B. Maddux of Cincinnati, and shall continue to breed as well as import Jersey cattle, Oxford sheep and Berkshire swine of the choicest and most fashionable strains. Our Oxford Down lambs are as fine as any we ever had and appear to do handsomely in these blue grass pastures—some of them weigh 100 pounds at 15 weeks old and have never had a bite of grain. The excellence of these blue grass pastures is also shown in the increased milk and butter yield of our Jersey's which have done remarkably well so far, and we predict some extra heavy yields from some of the animals comprised in our shipment which we expect will arrive from the Island

of Jersey early in August. This importation, numbering some 60 heads, is said to be the finest and most valuable shipment that ever left the Island. It includes Young Garenne (a granddaughter of the famous Coomassie) that made with her second calf 17½ Jersey pounds butter (equal to 19 lbs. U. S.) in seven days, and has just had the honor of winning the first prize over all Jersey at the Royal Show. Bonheur and her handsome bull calf; this is a good butter cow and is the dam of that noted bull "Farmer's Glory," whose get have met with extraordinary success in the show rings on the Island. His get are eagerly sought after in this country—witness the sale of three 12 months old heifers that averaged \$327 apiece at the recent Wing sale. Coomassie's sister, as well as niece, and a number of other close relatives, Fancy Fan's sister, (the only close relative on the Island,) a five year old sister of Farmer's Glory, several daughters of Tormentor, (grandson of Coomassie,) including Mr. Arthur's Rose, one of the highest priced animals in the shipment, twenty odd head sired by Farmer's Glory, and, last but not least, Mr. Bosdet's Rose, whose butter record is 16 Jersey pound in 7 days (equal to 18 lbs U. S.). She is the dam of Mr. Wing's Surprise of Maple Shade that recently sold for \$250 when 13 months old. With Rose comes her whole family which consists of a two year old daughter and heifer calf, and a younger daughter by Farmer's Glory.

At same time we are also importing about 200 head of Oxford Downs, the coming or "already come" sheep of the day. This shipment is the cream of the very best flocks in England, and were selected early in spring while the sheep were still in their fleeces, the object being to import only those with thick close wool for the better protection in our Western climate. Since their purchase they have been winning all the best prizes at the most important English shows, and we can also report similar good fortune with our Jerseys on the Island. All the stock was selected in person by T. S. Cooper, the cattle with the assistance of Mr. Francis LeBrocy, St. Peters, Jersey."

[See their advertisement in our advertising pages.—EDS. MD. FAR,

Col. J. W. Ware, of Clarke County, Virginia.

The following reminiscence of the "venerable" Col. Ware, so long a time the welcome correspondent of the MARYLAND FARMER, we take from the *Southern Planter and Farmer*. We feel sure our readers will join us in the congratulation we tender to our old friend upon his activity and health so seldom bestowed upon one close upon 80 years old. We trust he may be spared many years yet to continue his impressive example upon the rising generation of American farmers.

"I suppose your use of "venerable" to my name may not be inappropriate. I was born August, 1802. This, by my count, makes me, next August, 78 years old—entering my 79th. But my son says I wish to cheat the high man-date out of a year. He counts my age from the number of birth-days; but the first birthday I was nothing. I was a year old only on the second. This thing is remarkable of me.—Seventy years ago I sprained my ankle; it swelled greatly, and I could not use it for a month. Since that time I have been as active and supple in it as the other. In the last two or three years I find I must dismount on the *right* side; my left always hangs in the stirrup, until I pull it off with my hand, and yet I can distinguish no difference in my use of the two. Again, in putting on a high-quartered shoe, I have no trouble in getting on the right, but in putting on the left, it cramps. 'Tis strange it laid dormant so long and then came out. I don't remember having a headache or spell of sickness since a little boy, if then; but I never used liquor or tobacco in any way. Not long since I rode over 100 miles in one day from not an early breakfast until 9 P. M., and I now ride to Winchester after usual breakfast, transact my business, and get back to a one-o'clock dinner—twenty-seven miles on horseback; work in the garden in the evening with a hoe, and go to bed without fatigue. I walk to Berryville and back to dinner (six miles), work in the garden in the evening, and go to bed without fatigue. Strange, I do not tire at my age, and I can jump any fence I can put my hands on the top

of. I never use spectacles. I can account for that. I used them a few years, then threw them aside, determined to resist their use. I did so for ten or twelve months, when my eyes acquired a new focus, and have never used 'em since. I can easily read the smallest print, and the Baltimore *Sun* on horseback. I persuaded my wife to the same, with the same result. I work a great deal. A man will rust out before he will wear out. I have a son in Chicago, a merchant; another in St. Louis, a physician; another a county circuit judge in Texas; another an Episcopal minister in Nelson county, Va., and another do. in Loudon county, Va. You must forgive so much *egotism*. I wish you everything you desire."

Sincerely yours, J. W. WARE.

For the Maryland Farmer.

Breeding Sows.

Breeding pigs pays well, in fact about as good as almost any other kind of livestock bred on the farm, taking the average profit for a term of years, and is a large and important branch of stock breeding both West and South.

To secure the largest litters, the best porkers, and the greatest number of litters each year, the breeding sows must have especial attention, and this they must have irrespective of breed. One great fault with swine breeders, is breeding the sows when too young and immature, thereby injuring the health of the sow, to a greater or less extent, and getting inferior pigs. We frequently see sows heavy with pig when only six months old, and find that it is getting to be a common thing for breeders to do this, to gain time. When a breeder wishes extra pigs, he will find it to pay him well, every way, to keep his sows open until they get plenty of size and substance, and not to bring them in with pig until they are at least a year old, and then keep them in the breeding herd just as long as they will have pigs, for ever succeeding litter, as a rule, is an improvement on the one which preceded it, until old age causes a decline.

We do not consider it good policy to have the boar too old, and never keep them for breeding after they are three years old, for they are apt to get savage

and unruly, besides being too heavy and sluggish in their movement to be desirable. We like a long bodied, roomy sow, and a close made, rather short boar, and from these we have invariably secured the best results.

In feeding breeding sows, care must be taken to keep them merely in good growing condition, and not fat, while they are carrying their young, for too high feeding makes it difficult and dangerous to deliver their young, as well as causes constipation, from which cause many sows eat their young. After the pigs are farrowed, the sows should be fed all they can stand to, for they need it to keep their litters growing rapidly and healthily, milk being the very best thing for both the sows and their young. A most excellent feed is a slop made from corn and oats ground and soured with hot water. On this feed, in connection with what milk can be given them from the dairy, they are sure to grow rapidly, if they get enough of it and have comfortable, roomy and cleanly quarters assigned to them. E., JR.

Making the Most of the Horse.

In France, when a horse has reached the age of twenty or thirty, it is destined for a chemical factory; it is first relieved of its hair, which serves to stuff cushions and saddles; then it is slaughtered and skinned; the hoofs serve to make combs. Next the carcass is placed in a cylinder and cooked by steam at a pressure of three atmospheres; a cock is opened which allows the steam to be run off; then the remains are cut up, the leg bones are sold to make knife handles, etc., and the coarser parts, the ribs, the head, et., are converted into animal black and glue. The first are calcined in cylinders, and the vapors when condensed form the chief source of carbonate of ammonia, which constitutes the base of nearly all ammoniacal salts. There is an animal oil yielded which makes a capital insecticide and a vermifuge. To make glue the bones are dissolved in muriatic acid, which takes away the phosphate of lime, the soft residue, retaining the shape of the bone, is dissolved in boiling water, cast into squares, and dried on nets. The phosphate of lime, acted upon by sulphuric acid and calcined with carbon, produces

phosphorus for lucifer matches. The remaining flesh is distilled to obtain the carbonate of ammonia; the resulting mass is pounded up with potash, then mixed with old nails and iron of every description; the whole is calcined and yields magnificent yellow crystals—prussiate of potash, with which tissues are dyed a Prussian blue, and iron transferred into steel; it also forms the basis of cyanide of potassium and prussic acid—the two most terrible poisons known in chemistry.—*American Horse Shoer.*

For the Maryland Farmer.

Summer Management for Sheep.

I have read, of course with interest, in July number of the *American Farmer* valuable instructions—"Cotswold Lambs and Summer Management," and in the MARYLAND FARMER same date—equally valuable instructions—"Winter Management of a Flock of Sheep," both by W. Legg; farmers will appreciate them. Years since, when I farmed, imported and raised this kind of sheep, importing always winners of the high prizes of the Royal Agricultural Society of England, and will state where our management differed. I never had cause to tar the nose; once or twice I sheared some lambs—as did some neighbours, all abandoned it as injurious to the lamb and no gain eventually in wool; I never changed shade trees except in changing of pasture—and never hauled fresh dirt over it; I took my ram from my ewes in November, and gave him company—he would die for want of company—and put him with the ewes in August or September; I weaned the lambs in June, at farthest in July 1st, put them on good pasture, the ewes on meager pasture until dried up, then on good pasture, to have them in thriving condition when receiving the ram. I always observed when a ewe was about to lamb, she would go to a corner of the shed and the others retire from her, gave no trouble in that; I did not breed a buck to his own get, or either sex to breeding until the fall after one year old—always had a new buck for the young ewes; I always bred from the best, deem it next to an impossibility to get and keep up a first class flock of sheep if bred incestuously or too young. Again to put the buck in August or Sep-

tember, the probability is both sexes are fat then and the sun too hot for the buck to go with and serve the ewes too—he ought to be fed and then turned with them at sundown and taken away at sunrise with company, the ewes will not graze in hot sun, and there is danger of their system becoming too languid to quicken their seed, they ought to be moderately fed in the day—the fattest will need it most—without it, there will be danger of missing lambs. With this breed, having wide backs, to rub them they get balanced on them, and unless relieved apoplexy follows. A pole ought to be put in the pasture—the but in a fork too high for a sheep, the other end on the ground so that any sheep or lamb can use it. I trust, however much this may be considered old fogish, that Mr. Legg will consider it done in no other spirit than that of farmer brotherhood.

J. W. WARE,
Berryville, Va.

[The above concise information will be valuable to young amateur breeders of sheep. Col. Ware has earned a high reputation as a practical farmer and successful breeder of Cotswold Shecp. In a private note, in regard to the above, he says, "to make it short I have used as few words as possible." *Multum in parvo*, is the right motto for every agricultural writer.—ED. MD. FAR.]

The Hereford Convention.

There was a meeting of the Hereford Breeders of the United States held, June 22d, at the Grand Pacific Hotel, Chicago, Ill. It was well attended, and was a grand success. The gentlemen in attendance were very enthusiastic on the subject of their favorite cattle, and were there from many different States. At this meeting was organized a society to be known as the "American Breeder's Association." The business committee presented an address to the society, embodying some excellent advice, upon the selection of judges at cattle shows, and their duties, which it would be well for all associations to consider when making up their programmes.

Skimmed Milk for Calves.

Mr. A. B. Allen says that a dairyman in the State of New York, who kept twenty-four grade Short horn and Guernsey calves, dropped last spring, has told him how he managed them, which may be of advantage to others. It is as follows:

They are allowed to suck their dams a few times immediately after birth, and then taken away, and taught to drink milk from the pail. This was warm and fresh from the cows for a week or ten days, and then skim milk was gradually mixed with it, till substituted entirely for the new milk. This was frequently lobbered, in very hot weather, before feeding, and was thought all the better for it, as being more easily digested. The calves were put into a good pasture, and when a few weeks old began to nibble the grass. The summer being very dry, this failed considerably during August; cut hay mixed up with wheat shorts were then given in place of it. One may judge how well those calves thrive when simply fed, for six or seven months old they weighed from 500 to 600 pounds each. The cream from the milk of the dams of the calves was made into butter of first-rate quality, stored till October, and then brought a good price.

Many think that choice calves cannot be well raised on skim milk, and therefore feed all new milk to them. But I think this is wasting the cream on such as are designed to grow up for dairy cows, and that they are all the better for this purpose when reared on the quality of milk which is the least fattening and gives the most muscle. Many a Short-horn heifer is injured for the dairy by being overfed, and kept too fat from its birth up to three years old, when is the usual time for it to drop its first calf. As fed above, the calves occasionally scoured, and to stop this some astringent medicine had to be given in their food. But if a heaping tablespoonful of oil meal, gradually increasing to a pint for each calf as it grew older, had been made into gruel and mixed daily with the skim milk, it would have prevented scouring, kept the bowels in good order, and made them relish their other food more

heartily. Flax seed, boiled to a jelly, answers the same purpose, also if ground, mixed with oats, one-fourth of the former to three-fourths of the latter, and then a quart or more according to the age of the calf, fed daily, is a good substitute for the oil-meal.—*Live Stock World*.

SALES of polled cattle are rapidly increasing in Scotland, both for home breeding and exportation. During the past year 163 animals more were sold at auction there than in any previous twelve months, and all at higher average prices than heretofore. They have been sought after lately in preference to ordinary Short-horns, and at better prices.

MIX a little sulphur with salt and feed occasionally to sheep. It will effectually destroy sheep ticks. The same remedy applied to cattle troubled with lice will soon rid them of vermin. The use of sulphur with salt repays the trouble of keeping a supply for cattle and sheep. If a mixture of one part of sulphur with seven of salt be freely applied, there will be no trouble with vermin.

Tri-State Picnic and Exhibition.

The Eighth Annual Tri-State Picnic and Exhibition will be held at Williams' Grove, Cumberland County, Penn., opening on Monday, August 29th, and closing Friday, September 2, 1881. This will be the only agricultural exhibition of general importance in Eastern or Southern Pennsylvania this year, as the State Agricultural Society has decided to hold its fair at Pittsburg, in September next, and we have therefore, every reason to believe that the Eighth Annual Tri-State Picnic will be greater in every particular than any heretofore held. We earnestly hope and confidently expect that members of Granges and farmers' clubs in Pennsylvania, West Virginia, Maryland, Virginia, Delaware, New Jersey, New York and Ohio will prepare liberal samples of their agricultural products for exhibition at the tri-State picnic; and we also hope to have contributions from every State in the Union.

This will be the largest meeting of farmers ever held in the United States, and it is

important that the show of agricultural products shall be on a grand scale, commensurate *with the attendance of the people*.

Manufacturers of and dealers in machinery, implements, musical instruments, etc., desiring prominent positions on the exhibition grounds, and persons wanting restaurant and other business privileges, will communicate on or before July 15th, with R. H. Thomas, FARMER'S FRIEND office, Mechanicsburg, Pa.—*Farmer's Friend*.

WHAT LAWES AND GILBERT HAVE DONE FOR AGRICULTURE—A recent English writer remarks:—From the days of Tull and David, agriculture has received a share of the attention of scientific men and experiments of a highly important and interesting nature have from time to time been made; but it was left for those great benefactors of agriculture, Lawes and Gilbert, to demonstrate what a systematic arrangement of experiments could do to further this important subject. Mr. Lawes commenced in the year 1843, by experimenting with plants in pots containing soils of his own preparation. Subsequently he associated himself with Dr. Gilbert, and instituted the experimental farm at Rothamstead, in the first place, with the view of testing the theories advanced by Baron Liebig, in regard to the mineral and organic food of plants; and in the second, of extending the knowledge of the plant's relation to the soil, etc. Besides the results of these early experiments, they have given to the world upwards of seventy memoirs bearing upon scientific agriculture and upon cattle feeding. Recently, Mr. Lawes has set aside £100,000, the experimental farm and the laboratory and its equipments to carry on the experiments for all time."

WE have several communications which arrived too late for insertion in this number, which is to be regretted, but they will keep. Among which is a practical letter upon the subject of sheep raising; their value as improvers of the soil, and great profitableness as farm animals, by an enlightened farmer, and successful sheep breeder of Montgomery county, Md.

LADIES' DEPARTMENT.

Chats with the Ladies for August.

BY PATUXENT PLANTER.

LOVELY SUNBEAMS.

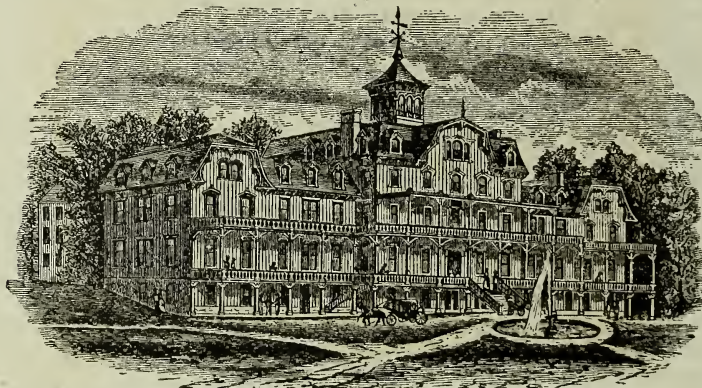
"O lovely sunbeams through the meadows dancing
On golden pinions all the livelong day.
Kissing young leaves on chrystal streamlets glancing,
Changing to living gold their silver spray;
Wee amorous elves, coquetting with the roses,
 wooing the daisy in her grassy bed
Till the shy flower unconsciously uncloses
Her dew-gemmed leaves and blushes rosy red.

* * * * *

"Dance lovely sunbeams, through fair country meads—
Bathe hall and cottage in pure, holy light, [dows.
From city slums go chase the mournful shadows
That fill poor homesteads with eternal night;
To those who pine in ignorance and sorrow,
May all your tenderest, holiest gifts be given,
That sorrowing hearts one ray of hope may borrow,
In the sweet knowledge that ye come from heav'n."

Our country friends, in the heated term, require some rest and recreation as much as professional men—the merchants, and the dwellers of the towns and cities. And while they, by nature of their secluded habits and lives of comparative retirement are not suited, or are indisposed to enter into the fashionable follies—the glare of expensive toilets and extravagant fashions of Newport, Saratoga or Long Branch, yet they require and ought to have some recreation after their exhaustive labors of the year—some mental refreshment for themselves and their families, at some quiet, cool place where they can breathe a different atmosphere and ease their minds as well as their bodies, that they may return invigorated and with renewed energies to their farm employments.

To such people in Maryland and farther south, I have often thought that the Baltimore and Ohio R. R. Co. offer great inducements, in their



"Deer Park."

So writes that sweet poetess—"Fanny Forrester,"—apostrophizing lovely sunbeams in her melodious song of summer. While sunbeams are beautiful, healthful, inspiring and necessary in the grand economy of nature, it must be admitted that when the dog days come, the gush of sunbeams are often debilitating and wearied man seeks the shade and pants for the cooling breeze. No class of people enjoy the sunshine and the shade as much as the denizens of the country. Our rural population have full opportunity to feel and to bless the sunbeams that give birth to the plants and flowers, and keep them growing 'till they mature into fruits and seeds for the delectation of man. But the farmer must labor and endure the scorching rays of noon-day, as well as enjoy the early morning sunbeams and bless the sunset rays.

fine hotels, for just the sort of quiet, agreeable resorts that the farmer and his family would be pleased with for a few days or weeks. These hotels, Deer Park and Oakland, of which I am enabled to give excellent representations, are mountain homes for the tourist and those who seek recuperation from ill-health or over-fatigue. Situated in the highest portion of the Big Savage plateau of the Alleghany mountains, the scenery is superb, while the air is pure, cool and health-giving.

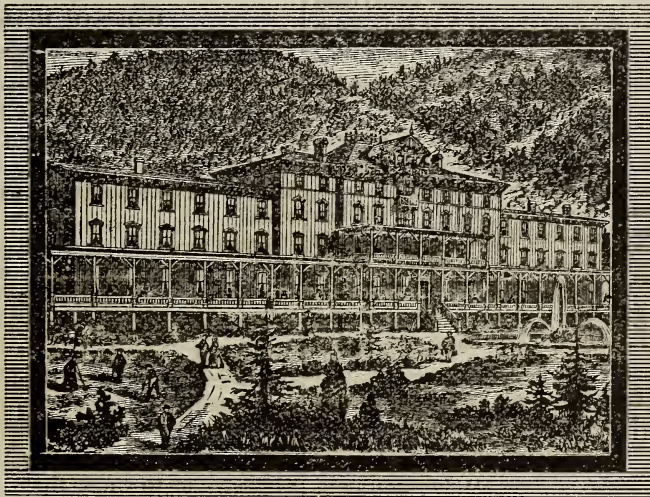
These hotels are only six miles apart with beautiful drives between the two. The railroad passes by each, and all passenger trains stop at each. The atmosphere is so bracing, the cuisine and all accommodations so excellent, the amusements provided are so many, and the quiet and comfort so nice, that an inhabitant of the

lowlands, when he reaches these abodes of health, feels as if he had been suddenly transported from malarious regions to the mountain tops of Switzerland, with the balmy airs of Italy combined.

The company at these hotels is always select and consists of the solid and useful citizens, and the highly respectable yeomanry of the country. Game is sufficiently abundant to attract the Nimrods, and the mountain streams are very attractive to the disciples of old Isaac.

These resorts, in connection with excursions on our beautiful bay, or a visit to Bay Ridge and other pleasant resorts that dot the shores of the Chesapeake, offer wonderfully inexpensive places where the over-worked towns-people and the dwellers of retired country homes can retreat for

raised on the farm, but being placed here by the fortunes of war, I am anxious to glean all the information I can get from the rural journals of the day. My husband, though having a profession, was raised upon a farm, and has a natural turn for agriculture. The only things that hamper us are ways and means, and in the effort to adapt myself to an uncongenial occupation, I am interested in whatever promises success. Like my lady friend I have never been able to get a good dinner on scraps. I have seen somewhere in print, several times in my life, that a Frenchman or a French cook, could at any time, get up a good dinner upon the waste of an American kitchen. And I invariably wondered who ate it. All necessary waste can be utilized



“Oakland.”

a day, or week, or month, and restore their health, or get rid of the weariness induced by the same daily routine of mental and physical exercise, and have that pleasant, rational holiday full of amusement and pleasure, conducive to the health and spirits of both young and old. All our farmers should embrace, once a year, the opportunities to make their families happy.

For the Maryland Farmer.

Household Matter, Poultry, &c.

SHENANDOAH CITY, VA.

Messrs. Editors:—Having been an interested reader of the Maryland Farmer for a number of years, I will avail myself of the privilege of replying to the Lady Farmer through your columns, at her request, hoping the effort may find favor in your eyes. Unlike her, I have not been

by keeping fowls; and just here my experience differs somewhat from my correspondent. I began with light Brahmas. They were a present from a friend, who brought them directly from New York. After several years' experience I had over a hundred fowls, which for beauty of plumage, fine form, and good savory flesh could not be surpassed.

They were corn fed and did not produce as many eggs as desired. They attained a large size, but were dull and inactive, depending upon others for a support. I next tried buff Cochins with exactly the same result. I found the Hamburgs the most profitable one for eggs, but too small for profit as early fowls for the table or market. They are, however, self-supporting in a great measure, inveterate scratchers, but not good mothers on that account, as they will scratch all day at nothing and starve the brood. Another disadvantage, they are non-setters, but will

fuss and fume until in despair you put eggs under them, only to find that in a day or two they have left the nest and stolen another to lay in. By keeping fowls of all these varieties, I combine in some measure the good qualities of each, and neutralize the bad. That fearful scourge, the chicken cholera, attacked us in the early stage of my experience. The result was seventy-five of my finest fowls consigned to one pit. I could not pass it without heaving a sigh, for many months. The remedy used most effectually was alum in their drinking pans, and sulphur and alum in soft food. I have had many to recover under this treatment, and have not lost any for several years.

When eggs brought a good price and it was an object to save, I discovered coffee would clear itself, and have not used one for that purpose in three years. The best brands of brown coffee, however, are so prepared as to dispense with the use of eggs for clearing.

We do not board our hands, only in harvest. We give them herring and eggs for breakfast, or cold, roast mutton and good, sweet, light bread, always baked the day before eaten. A chicken pot pie is a great treat to them, also fresh fruit pies. We send iced lemonade to the field at ten o'clock, with crackers and cheese. We dine at twelve, rest two hours, and have supper at five, with lemonade again. We do not use any spirituous liquor.

We give coffee all the time, and plenty of milk for dinner, either sweet or buttermilk, as they are both about equally relished.

We keep a dairy of from six to eight cows. The butter is made by machine. We use the Bullard churn, and the butter is rolled instead of being worked with a paddle. We never touch the butter with the hands. The milk is kept in tin cans that hold three gallons each, with a ventilator attached to the lids. The pans are placed in troughs of water filled by the drippings of the ice-house.

But for fear my letter prove too long I will stop, as there may be something to say about the hop harvest in a few weeks, the apple crop, and how to keep and cook them nine months in the year.

If my letter should prove worthy of notice, I send congratulations to my Lady Farmer, wishing her continued success in perhaps the noblest of all employments, but for which not every mind is adapted.

M. A. G.

[Thanks for the above practical letter and hope soon to hear from Mrs. M. A. G., as promised, about hops and apples, etc., and on any other subjects. Such excellent letters from lady correspondents as we have been favored with heretofore, render our Ladies' Department highly popular and instructive. We regret that more of our fair readers do not contribute to the pleasure of their sisters. In household economy everybody is personally interested, and indeed the household is the most important department in the affairs of man's existence in this sublunary sphere. What lady friend will speak next? Our columns are always at the service of the "best portion of God's creation."—Woman.—Eds. MD. FAR.]

Domestic Recipes.

IN boiling dumplings of any kind put them into the water one at a time. If they are put in together they will mix each other.

NEVER wash raisins that are to be used in sweet dishes. It will make the pudding heavy. To clean them wipe with a dry towel.

CUTLETS and steaks may be fried as well as broiled, but they must be put in hot butter or lard. The grease is hot enough when it throws off a blackish smoke.

THERE is a greenness in onions and potatoes that renders them hard to digest. For health's sake put them in warm water for an hour before cooking.

TO ALL lovers of onions the scent is so offensive as to cause them to forego them entirely. I wish all such would try eating them and then chewing a few grains of coffee afterward. It acts as a perfect deodorizer.

THE beauty and color of hair may be safely regained by using Parker's Hair Balsam, which is much admired for its perfume, cleanliness and dandruff eradicating properties.

SUFFERING WOMEN.—There is but a very small proportion of the women of this nation that do not suffer from some of the diseases for which Kidney-Wort is specific. When the bowels have become costive, headache torments, kidneys out of fix, or piles distress, take a package, and its wonderful tonic and renovating power will cure you and give new life.—*Watchman.*

Housekeeper's Help.

Now is the season to refer to the following useful tables. The figures can be slightly changed to suit different tastes :

Boil Cherries moderately..	5 min.
“ Raspberries “	6 “
“ Blackberries “	6 “
“ Plums moderately..	10 “
“ Strawberries “	8 “
“ Whortleberries.....	5 “
“ Pie Plant, sliced.....	10 “
“ Small Sour Pears, whole...30	“
“ Bartlett Pears, in halves ..20	“
“ Peaches, in halves.....	8 “
“ Peaches, whole.....	15 “
“ Pineapple, sliced $\frac{1}{2}$ in thick, 15	“
“ Siberian or Crab Apple, whole	25 “
“ Sour Apples, quartered....	10 “
“ Ripe Currants.....	6 “
“ Wild Grapes.....	10 “
“ Tomatoes	20 “

The amount of sugar to a quart jar should be :

For Cherries	6 ounces.
Raspberries	4 “
Lawton Blackberries.....	6 “
Field Blackberries..	8 “
Strawberries	8 “
Whortleberries.	4 “
Quinces.....	10 “
Small Sour Pears, whole... 8	“
Wild Grapes.....	8 “
Peaches.....	4 “
Bartlett Pears.....	6 “
Pineapples.....	6 “
Siberian or Crab Apples... 8	“
Plums..	8 “
Pie Plant	10 “
Sour Apples, quartered.... 6	“
Ripe Currants.....	8 “

ANOTHER BIG EGG from the energetic hens of Baltimore county. Since we published the big egg of Catonsville Avenue, in our last number, we have received one from a small Leghorn hen, owned by Mrs. Conradt, residing on same Avenue, that is not quite so heavy, but is more than a half an inch longer than the Ross egg. Surely the hens are determined not to be outdone this year by any other departments of nature in producing curiosities and strange events and sights. This is a *remarkable* year, all things considered,

Notice of Advertisements.

We ask special attention to the advertisement, in another column, of superior stock, by that prominent breeder of fine stock, E. B. Emory, Esq. The high character of his stock has secured ready sales at fair prices. In writing to us, Mr. E., has been pleased to say: “My advertisement in your paper has brought me many inquiries, and from them I have made several sales.”

Farmers who wish to improve their cattle, with an animal that belongs to that breed—the Short-horn—which for a long time has been considered as the best for combining milking qualities and making the greatest quantity of nice beef at the earliest maturity, ought to correspond with Mr. Emory, and secure a registered Short-horn from his popular herd. We give a list of sales made recently by Mr. Emory. It shows how his Poplar Grove Stock are admired and eagerly sought for.

To John B. Brown, Esq., 1 yearling bull, Rg. Short-horn, \$110; Thos. D. Sheppard, Annapolis Junction, Md., 1 bull calf at \$100; 1 Rg. Cotswold Buck at \$45; 4 Cotswold yearly ewes at \$25 each; 1 Southdown Buck \$20; Charles N. Hawkins, Virginia, 1 Cotswold Buck lamb \$15; Dr. J. M. Finney, Bel Air, 1 Cotswold buck lamb \$15; R. C. Foreman, Wye Mills, 1 Berkshire boar pig \$5; Thomas Cecil, Centreville, 1 pair Berkshire pigs \$10; Rev. T. S. Dewing, Centreville, 1 pair Berkshire pigs \$10; R. B. Sheely, Pa., 1 pair Berkshire pigs, registered, \$20; W. E. Morris, Centreville, 1 grade Short-horn calf, \$30; pair of Berkshire pigs to J. Emory, of W., \$10; three pigs to Mr. Berry, of Md., \$15; and on the 21st of July to C. Wright Spry, Kent Co., Md., 5 Short-horn, registered, calves, (1 bull and 4 cow calves) for \$450; on 22d July, to C. P. Jump, of Centreville, Md., 5 high grade Short-horn cows at \$400. These sales show that Mr. Emory sells at living prices and finds ready sales by informing through the Maryland Farmer all who want to buy fine stock that he has them for sale,

Genl. Meem's Great Sheep Sales.

We call attention to the advertisement of Genl. Gilbert S. Meem's public sale of sheep at Washington County Fair Grounds, Hagerstown, Md., on Tuesday, 25rd August, next; and at new Baltimore Stock Yards, on Friday, 26th August next.

We have every reason to know that the sheep which will be offered at these sales will be, in every respect, worthy the attention of our breeders of sheep, and at which sales great bargains may be had, hence we urge upon all who may want to get one or more of these improved breeds to be on hand, and at least by their presence give countenance to so laudable an enterprise.

BALTIMORE FEMALE COLLEGE.—It gives us pleasure to call public attention to the advertisement in this issue of our Journal, by the President, N. C. Brooks, LL. D., of the Baltimore Female College. This is the oldest Female College in the State, having been established more than thirty years and has always maintained a high reputation. Dr. Brooks, a gentleman of learning and author of several classical works has secured the services of trained, accomplished professors and assistant teachers, and thereby made the college very popular. It is an Institution very similar to the Vassar Female College of New York. It behooves every parent and guardian to select for their wards a college in high repute, and in the performance of that duty the strictest investigation should be made, before the ward, especially if a girl, should be sent to a college or seminary. Having full confidence in the Baltimore Female College, we recommend it to the earnest consideration of all who have not yet fully determined upon a college to which their female charges are to go to finish their education.

Remind your neighbors of the benefit the MARYLAND FARMER has done you.

NEARLY all the ills that afflict mankind can be prevented and cured, by keeping the stomach liver and kidneys in perfect working order. There is no medicine known that will do this as quickly and surely, without intertering with your duties as Parker's Ginger Tonic.—See advertisement.

MY GOOD WOMAN—Why are you so out of sorts, never able to tell folks that you are well? Ten to one its all caused in the first place by habitual constipation, which no doubt finally caused deranged kidneys and liver. The sure cure for constipation is the celebrated Kidney-Wort. It is also a specific remedy for all kidney and liver diseases. Thousands are cured by it every month. Try it at once. *Toledo Blade*.

Agricultural Notes.

MORE than 400,000 tons of cotton seed are now used in the South. From this 5,000 bales of cotton batting are obtained, being the product of the lint in the process of working the seed up. The hulls are used for fuel in the mills, and the ashes make a valuable fertilizer, and are also leached for lye to make soap. The meal obtained from the kernel is subjected to a hydraulic pressure of 196 tons for seventeen minutes, and after the oil is pressed out, the cake is of a rich yellow color, and is used for food for stock. It is shipped in 200 pound sacks. The oil thus obtained amounts to about 15,000,000, gallons in the United States, of which 10,000,000, gallons are exported and used to adulterate olive oil, in the proportion of three parts of cotton seed oil, to one of olive oil. The deposit left when the oil is refined is used to make soap, and also for making dyes. Thus nothing is lost. There are in the country now fifty-six cotton seed oil mills, of which Louisiana has nine. Last year, on account of a cotton-seed war, the price went up to \$17 per ton, but now an association has been formed and the price is regulated by the law of supply and demand.